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ABSTRACT

This evaluation of the second-year (1986-87) implementation of the middle school Dropout Prevention Program (DPP) of the New York City (New York) Dropout Prevention Initiative (DPI) focuses on student characteristics, program services, and outcomes. The 29 DPP middle schools were divided into two models. Fifteen of the schools comprise Project Connect, with services provided by the New York City Board of Education (BOE); the other 14 were served primarily by community-based organizations (the CBO model). Data were analyzed from the following sources: (1) the Board of Education's student data base; (2) one-time check-off lists of services provided; (3) a monthly summary of service reports; and (4) a survey of 1,718 targeted students. Summary findings included the following: (1) implementation had reached a routine stage of activity for most DPP components in most schools by June 1987; (2) there were very large differences among schools in the targeted students' levels of risk; (3) the frequencies of services were comparable between the CBO model schools and the Project Connect model schools, with the exception that the CBO schools emphasized individual and group counseling more than the Project Connect schools; (4) overall, the program failed to improve students' chances of completing high school; (5) those schools that showed significant gains were characterized by initiative and creative use of resources. Recommendations for the third year of the program are included. Statistical data are included on 32 tables and 26 graphs. (FMW)

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EVALUATION OF THE NEW YORK CITY DROPOUT PREVENTION INITIATIVE

FINAL REPORT ON THE MIDDLE SCHOOLS FOR YEAR TWO, 1986-87

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Dropout Prevention Initiative Evaluation
Teachers College, Columbia University

1986-87 Final Report
Part One: Middle Schools

Summary of Findings and Recommendations

The 1986-87 school year was the second full year of the New York City Dropout Prevention Initiative (DPI), involving 10 high schools and 29 feeder middle schools from the Dropout Prevention Program (DPP) and three high schools from the state's Attendance Improvement/Dropout Prevention (AIDP) Program. This evaluation report focuses exclusively on the middle school programs and presents data on middle school student characteristics, program services, and outcomes for this Year Two. In an Interim Report published in September, 1987, Teachers College analyzed the Year Two implementation in detail. Those findings are summarized and added to in the present report.

The 29 DPP middle schools were divided into two program models in 1986-87. In 15 of the schools, personnel hired by the Board of Education (BOE) provided all program services (the Project Connect model). In another 11 schools, a major part of the services were provided by community-based organizations under contract to the Board of Education (the CBO model), while some BOE staff were also employed. In three schools, the CBO contract was cancelled in the middle of the year, and the schools shifted to the Project Connect model. These schools are not included in the comparisons of the Project Connect and CBO models as such, but they are included in analyses at other levels, since the developments in this case can be regarded as one of the natural courses of implementation of a program as complex as the DPP.

Program Implementation

By June, 1987, the implementation of the Dropout Prevention Program was found to have reached a stage of routine activity for most of the components in most of the middle schools--"routine" meaning that activities occurred on a regular basis, procedures were set, and staff knew their roles, but also that few major changes had been undertaken during the year. This was a substantial development beyond the program's first year, when more activities were in start-up phases. At the same time, relatively few components were being scrutinized within schools for refinement or for larger, more general changes, except as the Office of Student Progress initiated planning at the very end of the year for program-wide changes anticipated for 1987-88.

Program facilitation occurred daily from the beginning of the school year in most middle schools. Under attendance

outreach, a variety of strategies were utilized to interact with families and students concerning student absences. Guidance or counseling in some form was offered in most of the schools, although in a few schools the DPP staff did not include someone who was licensed or certified for counseling. Career education was the most prevalent alternative educational program, especially in the Project Connect schools; recreation and tutoring were other prominent alternative education activities, especially in the CBO schools. Health services and activities to link students with high schools were offered on a much less regular basis. These statements denote how staff resources were allocated. The frequencies of actual services to students are indicated by records of these services, which are summarized below.

Support for the program at the district level varied considerably from one district to another. However, the Office of Student Progress (OSP) carried out a centralized system of supervision of the Board of Education DPP staff in all 29 schools. The system included the collection of Monthly Summary of Service Records and visits to the schools to provide technical assistance to staff. Both the testimony of staff and records of the OSP visits to the schools suggest that the technical assistance consisted first of all in trying to bring about compliance with Board of Education standards for the program and only secondarily in problem solving with DPP staff.

Despite the characterization of program activity as "routine," individual schools varied considerably in the problems they confronted--for example, budget and staffing, their solutions to these problems, and the innovativeness of the components they implemented. The Interim Report described examples of successfully implemented components, and this Final Report includes some further observations about implementation in those schools for which exceptionally high gains or losses have been found on the outcome measures.

Key factors that affected implementation in the schools included the timing of budget approval and the availability of funds, the availability of staff to fill positions, the relationships between CBOs and schools, staff quality, and the schools' overall commitment to the Dropout Prevention Program, especially the commitment of the principals. We judged twelve of the 29 principals highly supportive of their DPP programs.

The Dropout Prevention Program was implemented sufficiently in 1986-87 to ask--summatively for that implementation stage and formatively for stages to follow, what outcomes did the program in this form have?

Characteristics of Students Served

The New York City Board of Education has a data base that is matched by few large city school systems in the nation. Not only does it require an enormous effort by the Office of Educational Assessment (OEA) to collect these data generally, but a tremendous amount of work by DPP staff in the schools and by the Office of Student Progress has gone into the special data collection required for this evaluation. It is in this context that we make the observations about missing data that are necessary to interpret our findings validly.

The primary analyses of student characteristics are based on data for 3922 middle school students provided by OEA. However, in a separate data collection, services were recorded on OSP's Monthly Summary of Service Reports for an estimated 4125 students in the months of November, February, and/or May, 1986-87, of whom Teachers College has identified 4077, and of these cases only 3382 match cases in the OEA set. This is mainly accounted for by the fact that the OEA sample does not include some students who were served only at the beginning or at the end, but not in the middle of the 1986-87 school due to some students leaving the DPP schools, and programs adding students late in the year. The statistics from OEA, then, represent an estimated 90% of all the students served by DPP in the middle schools in Year Two.

For the 3922 students in the OEA sample, data are missing for a substantial number of cases: 30% are missing either 85-86 or 86-87 attendance data, 17% are missing either 85-86 or 86-87 courses data, and 15% to 38% are missing one or another reading or math test score. It is likely that the students for whom there are missing data, or who were served but are not included in the OEA data set at all, are significantly different from the students for whom the data are complete. In particular, students for whom 1986-87 attendance data are missing but for whom courses passed data are available in fact had a significantly lower rate of passing courses in 1986-87 (58%) than students for whom both attendance and courses data are available (71%).

Almost half (48.9%) of the DPP middle school students in the OEA sample were enrolled in the eighth grade. About one-third (32.8%) were enrolled in the seventh grade, and one fifth (18.3%) were in the ninth grade.

The modal age of targeted students was 14 (median 14.0, mean 13.8). Comparing actual age with age expected for grade level, 22.2% were two years overage for their grade and 3.8% were three or more years overage.

Only 245 of the 3922 students had been administered the Language Assessment Battery (LAB). Of these, 61.6% (representing just 3.9% of the total sample) had test scores below the 20th

percentile, and were thus identified as having Limited English Proficiency (LEP). This might have been an underestimation of the proportion of students in the OEA sample with limited English proficiency, since much higher percentages of the middle school students responding to the Teachers College survey (see below) indicated that they spoke a language other than English with their friends (18%), or at home (34%), or said they lived in a home where a language other than English was spoken by the adults (45%).

The average prior year attendance for students was 78.0%. Prior year attendance was higher in the fall (81% average) than in the spring semester (74.2%).

Almost half (46.4%) of the students had failed 2 or more major subjects in the prior year. Two-fifths (40.5%) were reading below grade level. These are all indicators of a population at risk and were criteria of selection for DPP services.

All 3922 students in the OEA sample were reported by DPP staff to have met one or another of the program's eligibility criteria. This check-off of eligibility indicated that over 80% of the targeted students were absent either 30 or more days in the 1985-86 school year or at least 15 days in Spring 1986. The remaining students were reported to have had slightly better prior attendance but to have met one or more secondary eligibility criteria, such as excessive lateness, half-day absences, LTA or LEP status, low reading ability, overage, prior course failure, or prior year program participation. A direct analysis of student characteristics on the OEA data found that approximately 65% of the students for whom 1985-86 attendance data are available were eligible on the basis of attendance. However, it is likely that a higher proportion of the students for whom these data are not available had low attendance. The proportion of students claimed to be eligible on the basis of secondary criteria was confirmed.

There were very large differences between schools in the targeted students' levels of risk on the various dimensions. The average prior year attendance rate of targeted students in the different schools varied from a high of 85.2% to a low of 69%. The average rate of passing major courses the previous year varied from 87.3% to 43.7%. In one school only 8.3% of students were overage, while in another 45% were overage. These differences imply very different patterns of need in the various schools and the necessity for different strategies for adapting staff to these needs. They might also imply basic differences among the schools themselves, in so far as schools might have been more or less effective in working with students so that they did attend school, pass courses, and get promoted to the next grade, during the year (or years) prior to 1986-87.

Records of Services

The evaluation had access to two DPP records of services to middle school students. The first record was a one-time check-off by DPP staff for whether service was received by individual students in each of five areas of service. Almost all targeted students (96.3%) were reported as having received attendance outreach services, and the majority of students as receiving performance incentives (88.6%), guidance and counseling services (78.3%), health services (67.2%), and career education services (73.2%). Participation in one or more of several different kinds of high school linkage services was reported for two-thirds (67.2%) of the students while less than half (43.1%) were reported as having taken part in an extended day, before- or after-school program. The individual schools varied considerably in the proportions of students who were reported as receiving the various services. Guidance and counseling was reported for larger proportions of CBO students than of Project Connect students, while for health services, career education, and high school linkage the pattern was reversed.

Students with high prior absences were less likely to receive services than students who were at a middle or low level of risk, except in guidance and counseling, which was reported more for students with higher prior absences.

The one-time check-off data are not nearly so detailed as the second source of service information, the Office of Student Progress's system for recording services in each category during each month. In 1986-87, Board of Education DPP staff in the 15 Project Connect middle schools submitted Monthly Summary of Service Reports (MSSRs) for each child in the program to the Office of Student Progress. BOE staff in the 14 CBO-model middle schools also submitted MSSRs each month for each child in the program to OSP, while CBO staff in 11 of these schools submitted MSSRs to Teachers College for November, February, and May. MSSRs were not submitted by the CBO staff of Touro College, whose contract was terminated in March; District 9 is thus not included in the comparisons of Project Connect and CBO-model schools, though it is included in the overall statistics for services reported (and later in the general analyses for DPP effects). Teachers College has analyzed the MSSRs for November, February, and May in the 1986-87 school year.

Overall, the most services reported in the three months combined were mail and phone (21,629 units), followed by individual guidance (13,957 contacts). In a high middle range were extended day sessions (7,639), school-student conferences (6,187), and group guidance (5,843), while home visits (3,874),

autodialer (2,617), and parent conferences or guidance (2,025) were in a low middle range. Relatively few services were reported under high school linkage activity (1,286) and contact with health personnel (809).

In most of the areas of service, there were substantial differences from one school to another in the frequencies of services reported. Still, in most areas the frequencies of services were fairly comparable between the CBO model schools and the Project Connect schools. The one exception was that the CBO schools appeared to emphasize individual and group counseling more than the PC schools. Much smaller proportions of students were reported having no conference or guidance contact in the CBO schools than in the PC schools, and, conversely, much higher proportions of students were reported having four or more such contacts in the CBO schools than in the PC schools, during the three months examined. However, differences in the interpretation of what constitutes a school-student conference or an individual guidance session partially accounted for these differences between the models, as well as for extreme variations in the number of conferences or individual guidance sessions reported in the individual schools.

Program Outcomes

The average attendance of the targeted students in 1986-87 was 76.7%, while in 1985-86 the average attendance of the students had been 78.9%. Targeted students passed an average of 70.1% of their major courses in 1986-87, or about three and one-half out of five major courses, compared with a pass rate of 64.7% in 1985-86. For the students for whom data in both years was available, the average attendance of Year Two program participants declined 1.6% (or 2.9 days) from prior year levels, and students passed on average 4.2% more courses (i. e., about 0.2 of one course more) than they had the year before. These outcomes represent a small gain over Year One of the Dropout Prevention Program, when students lost about 4% attendance and passed about 1.5% more courses than the year before. In 1986-87, 35% of the targeted students improved their attendance. This figure was less than the Chancellor's objective that 50% of the targeted students improve their attendance. However, 59.4% of the students who had failed at least one course in 1985-86 increased the proportion of courses they passed in 1986-87. This amount exceeded the objective that at least half of the students increase their proportions of courses passed in 1986-87. At the same time, 3f 5% of the students who had not failed a course in the prior year did fail one or more courses in 1986-87. In the middle schools overall, the Dropout Prevention Program as implemented in Year Two failed to improve students' chances of completing high school appreciably. This conclusion is supported by a finding that for a control group of 790 students in the same 29 middle schools (whose prior year attendance made them eligible

for services but who were not enrolled in the DPP or a similar program), there was an attendance loss of 2.4% between 1985-86 (67.4%) and 1986-87 (65.0%). The change for the control group, then, was very similar to the change for the DPP targeted students.

While the average attendance rate in the schools overall in 1986-87 was 76.7%, the rate in individual schools ranged from 65% to 85.4%. Taking into account the prior year attendance, the greatest increase in attendance for a school was +4.5% and the greatest decrease was -6.7%.

The average rate of passing major courses in the schools in 1986-87 was 70.1%, but the rate in individual schools varied from 52.1% to 82.2%. Relative to the number of courses passed in 1985-86, the largest increase for a school was +28.4% and the largest decrease -21.8%.

Regression analyses

School effect. A regression analysis controlled for students' prior year attendance and then asked how attendance in 1986-87 was affected by the students being in one school or another. Prior attendance accounted for 31.8% of the variance in Year Two attendance, while the particular school in which a student was enrolled had a much smaller relation to the outcome measure, explaining 2.8% of the variance in 1986-87 attendance when prior attendance was controlled.

A similar analysis held constant students' rate of passing courses the prior year and asked how the proportion of courses passed in 1986-87 was affected by schools. The proportion of subjects passed in 1985-86 explained 11.5% of variation in subjects passed in Year Two, while schools accounted for an additional 5.9% of the variance. This indicates a substantial influence of a student's being in one school versus another on courses passed. There was a difference of 31.8%, or one and a half out of five courses, between the school whose students had the highest adjusted proportion of subjects passed and the school with the lowest adjusted proportion.

District effect. When districts were used instead of schools in these analyses, they explained only 0.8% of the variance in 1986-87 attendance after prior year attendance was controlled, and 2.3% of the variance of courses passed after courses passed in the prior year was controlled. Since CBOs are located in different districts and to a certain extent are identified with these districts, this implies that differences between the CBOs did not account for much of the variance, especially in students' attendance gains or losses.

Model effect. There were only very small differences between the Project Connect (PC) and CBO models in terms of the program outcomes. The average attendance in 1986-87 was 77.5% for the PC students and 76.1% for CBO students, while the average change in attendance was -1.4% for PC students and -1.5% for CBO students. The average proportion of courses passed in 1986-87 in the PC schools was 71.8% and in the CBO schools was 70.8%, while the change in courses passed averaged 5.3% for the PC model and 4.1% for the CBO model. A regression analysis found that the models explained only 0.02% of the variance in attendance after prior year attendance was controlled, and 0.03% of the variation in subjects passed after prior year subjects passed was controlled.

Effect of services recorded on check-off. Two sets of regression analyses were performed to examine the relationship between services received and outcomes. First, analyses were carried out using the one-time check-off data. After controlling for prior year attendance, services checked accounted for 2.8% of variance in 1986-87 attendance. Performance incentives had the largest positive effect on attendance and attendance outreach was associated with the largest negative effect. Extended school day, career education, and guidance services had very small positive relationships with attendance, high school linkage had almost no relationship with attendance, and health services had a small negative effect on attendance. In general, this configuration seems to reflect how the services were being distributed--attendance outreach to absent students, health referral to students returning from an absence, and counseling and educational programs to students present in school to be counseled or taught--rather than the success of the services in changing attendance.

Similarly, a regression analysis using the check-off data found that services explained 2.6% of variance in subjects passed after controlling for students' initial differences in subjects passed the prior year. Again, subjects passed was negatively related to attendance outreach and health services and was positively related to other services, most of all to the receipt of incentives, which one expects to be awarded to students who have improved in attendance or grades.

Effect of services recorded on MSSRs. The second set of analyses was conducted using the three-month sample of Monthly Summary of Service Reports. The number of students with complete OEA and MSSR records for this analysis was 2449, representing 63% of the total OEA sample and 59% of the total MSSR sample. Prior year attendance explained 28.5% of the variance of 1986-87 attendance, and the MSSR services explained an additional 12.3% of variance. Students who received more communications (mail, autodial, and telephone), home visits, health referrals, and parent conferences or guidance had lower 1986-87 attendance, once

their prior attendance is taken into account. Students who received more extended day services, group guidance, high school linkage, individual guidance, and school-student conferences had higher 1986-87 attendance, after prior attendance is controlled. As with the check-off data, the MSSR findings generally seem to reflect the distribution of services vis-a-vis students' attendance as much as the effect of the services in changing attendance.

For the analysis of subjects passed with MSSR data, complete records were available for 2939 students. Courses passed in the previous year explained only 11.6% of the variance in the proportion of 1986-87 subjects passed. The MSSR services explained an additional 9.2%. Here, however, it was communication, home visits, and meetings with parents that were associated with a decline in subjects passed, while group guidance, extended day, and school-student conferences were associated with a gain. Health referrals, high school linkage, and individual guidance were not significant.

In order to check the possibility that students' receipt of different services depends on students' current attendance, and that attendance thus actually accounts for some of the variance in outcome that services appear to explain, an analysis was done that controlled on 1986-87 (current year) attendance and examined the contribution of services to courses passed. Current attendance accounted for 28% of the variance in courses passed in 1986-87 and the MSSR-recorded services accounted for only an additional 1%. The only service which maintained a significant contribution to courses passed after attendance was group guidance or counseling. Each session of group guidance accounted for a 1.3% increase in the proportion of subjects passed. This analysis probably underestimates, as the analysis controlling on 1985-86 courses passed overestimates, the contribution of the MSSR services to students' passing courses in 1986-87. While the program as a whole did not produce consistent gains in student outcomes in Year Two, group guidance is the program component which on the basis of the service data appears most likely to contribute to improved student performance.

Effect of group guidance on students at different levels of risk. A further analysis asked if group guidance made more of a difference for students at one level of risk than at another. After controlling for prior year attendance, the present-year attendance of the students with the highest levels of absence in the prior year was strongly affected by the number of group guidance sessions they had during the outcome year, while students with the lowest levels of previous absence were not affected by group guidance. While this interaction effect applied to the attendance outcome, however, it did not hold for the outcome of courses passed. Defining risk still in terms of prior-year attendance, group guidance contributed positively to

courses passed for students at both high and low risk levels. Other analyses of the impact of services on students at different levels of risk are currently being conducted.

Despite the fact that these effects of group guidance are significant, they account for less variance than one wants to see for the effect of an intervention. The most apparent reason for this is that fewer than half of the students received even one group guidance session during the three months represented by the MSSR.

Results of the Student Survey

Teachers College administered a survey to 1995 targeted middle school students in Spring 1987. Of these students, 1718 were also identified on the OEA tape for 1986-87, i.e., the survey respondents included 44% of the OEA sample. The results reported here are just for the 1718 students who are also in the OEA sample. Since the respondents were present in school on the days when the survey was given, and thus may have better average attendance than non-respondents, it is cautioned that the results are likely to portray a too optimistic picture of the backgrounds, attitudes, and experiences of the middle school target population as a whole.

Four-ninths (46%) of the responding students identified themselves as Hispanic or Spanish. About one-third (32%) said they were black or Afro-American, and an additional 8% described themselves as Asian-Americans or Pacific Islanders. Only 4% of the respondents described themselves as white, while 9% selected "other". Forty percent of the students said that the adults in their home spoke Spanish most of the time.

The vast majority of the respondents lived with their mother, stepmother, or female guardian, and just under half (48%) lived with their father, stepfather, or male guardian. Well over half of the students lived with at least two other children in the home.

Many students did not know how far their mothers or fathers went through school, although of those who did know more than half reported that their parent(s) had completed high school. A large proportion (43%) of the respondents thought that they would finish college, and an additional 22% anticipated attending some post-secondary school. Only 6% of the respondents said they did not expect to graduate from high school.

Nearly a quarter of the students did not have telephones in their homes.

A large majority of the students had worked for pay, and of these, one-quarter were working 21 hours or more per week at

their current or most recent job. More than half indicated that they go out with a boyfriend or girlfriend at least once a week.

Targeted students described their schools as the locus of a considerable amount of violence. Most of the respondents had seen attacks by students on other students, and the majority had also seen attacks by students on teachers and by teachers on students. About a quarter of the students said that they were at least sometimes afraid that someone would hurt or bother them at school, or on the way to or from school.

About a quarter of the respondents claimed that there was almost always so much noise in class that they could not keep their minds on class, or so much noise in the hall that their teachers could not teach. On the other hand, another quarter of the students said there was almost never a disruptive amount of noise in the hall or in the classroom.

While a quarter of the students believed that their teachers almost never treated them with respect, another quarter believed that their teachers held them in high regard. These differences in students' experience suggest important variations in both the school environment itself and in students' sensitivity to positive or negative facets of the school environment.

The survey asked students about their experiences with a variety of DPP program components, but it cannot be assumed that students responded only in terms of DPP sponsored services, e.g., in saying whether they had gone on a trip. Three-quarters reported learning about different kinds of jobs or careers at least once during the school year. At least two-thirds of the students had received one or another attendance incentive; a like figure had been given some form of health care in the school; and two thirds had participated in some kind of high school linkage event. More than half had attended an extended-day program at least once. Nearly half of the respondents reported that they had <u>not</u> talked one-on-one with a teacher, counselor or other adult in the school about problems at school or at home, and three-fifths reported no group counseling. Three-fifths learned about different careers less than once a month. Over three-fifths had not been brought into direct contact with a high school through a class visit or attending a special event or after-school activity at a high school. Three-quarters claimed to have received no tutoring during the school year (indeed, tutoring was an option, but not mandated, under alternative education).

We have not yet correlated the students' survey responses with the MSSR reports of services to these same students, but it is clear that many of the respondents perceived low levels of service, despite this being the sample of targeted students who were in school to respond to the survey. It is particularly

noticeable that the students reported receiving one-on-one counseling less than is suggested by the MSSR frequencies for individual guidance or school-student conferences; at the same time their reports of group discussion were consistent with the MSSR reports for group guidance.

The students' reports of services received varied significantly according to whether they were in CBO schools or in PC schools. There were no differences for various incentives and only slight differences on several indicators of attendance outreach and health services. However, students in the CBO schools reported significantly higher levels of talking one-on-one about problems, discussing problems in groups, and tutoring, while PC students reported more frequent career education services. These differences paralleled staff reports from the CBO and PC schools on both the OEA service check-off and the MSSR.

In response to a question about different reasons for absence from school, by far the most common reason given by the students was their own illness. The next most common reasons were "just didn't feel like going", having to take care of someone at home, and having problems at home. Much smaller, but still significant numbers of students said they had missed at least a day of school because they wanted to do something with friends, had problems with other students, had problems with an adult at school their family left the city for a while, or they had to work.

Two-thirds of the students said that when they are absent a lot of days, the school sends a letter to their home. Less than half, however, said that their parent or guardian is asked to come to the school when they have been absent a lot of days, or that someone from the school visits their home. Three-fifths reported that after their most recent 1986-87 absence, a teacher, counselor or other adult in the school asked them where they had been; conversely, two-fifths of the students reported that this did not occur or that they did not know. At the same time, very few students reported a negative reaction from teachers when they returned to class, and most students said they received help in catching up, either from a teacher (30%), another student (35%), or someone else (9%). A few (7%) claimed they didn't need to catch up on any work, and a sizeable fraction (20%) said that when they were absent from classes a long time, they just fell behind.

Four-fifths of the students reported at least one lateness of a period or more in length during the 1986-87 school year. But half of the responding students said that they never cut classes on days when they were at the school.

There was a great deal of variability in students' reports

of how much they liked school. Most questions showed a clumping of about one half of the responses in the middle, with about a quarter reporting positive attitudes and the remaining quarter reporting negative attitudes. Students' liking of their classes and of work in class were more skewed, with more students reporting positive feelings about their classes.

Teachers College is currently carrying out a set of multivariate analyses that control on a variety of student background variables and then examine the influence of survey derived school environment measures and program service indicators on the outcomes of student attendance, courses passed, and students' liking of school. The results of these analyses will be included in a future report.

Schools with Exceptional Year Two Outcomes

Although there was not a substantial change for the schools overall in the attendance or courses passed of DPP targeted students, there were large differences between the schools that gained the most and the schools that lost the most, especially in courses passed. Using the regression analyses assessing the relative effects of the schools after prior year attendance or courses passed had been accounted for, we identified the four schools with the greatest attendance gains, the four with the greatest gains in courses passed (seven schools altogether, because of one school appearing in both sets of high gain schools), the four schools with the greatest attendance losses, and five schools with the greatest losses in courses passed (again seven schools altogether, because two schools appeared on both lists). In order to examine these exceptional schools in depth, we compared them on a variety of indices from statistical profiles compiled by the Board of Education, as well as from our observations of implementation in these schools in Year Two.

On most indices of school organization that we examined, the exceptional gain schools were not systematically different from the loss schools. The several sets of schools did not differ systematically in the size of the school register, the three-year stability rate, intermediate vs. junior high organization, or utilization rate. This is not to say that any of these variables is unimportant in the life and achievement of a school, but that in themselves these variables did not appear to explain the relative sucesses and failures of the schools. The courses gain schools had a larger average class size than the courses loss schools, and class size correlated positively with gain in courses passed in an analysis for all of the middle schools. From this we infer that the gain schools countered the expected effects of larger class size, through measures like the special grouping of targeted students in smaller classes that was observed in one school, and the high personalization of DPP staff contact with students that was observed in two others.

When the reading and math test scores of the total general registers of the gain and loss schools were compared, the only difference was that math scores were systematically higher in the attendance gains schools than in the attendance loss schools.

Focusing more specifically on the characteristics of the targeted students themselves, some differences did emerge. Targeted students in the attendance gain schools had passed more courses in the previous year than targeted students in the attendance loss schools. Likewise, targeted students in the attendance gain schools had somewhat higher reading and math test scores the previous year than targeted students in the attendance loss schools. However, the only prior-year academic difference between the students in the gain and loss schools on the courses passed outcome was a higher math test average in the gain schools than in the loss schools. Finally, targeted students in the loss schools, both for attendance and courses passed, were older than the targeted students in the gain schools. All in all, the targeted students in the loss schools started the year somewhat more at risk than the targeted students in the gain schools. Still, when regression analyses controlled on one or another of these variables, the same schools emerged as the strongest gain or loss schools.

The DPP program was implemented slightly earlier in the year in the gain schools than in the loss schools. The activities in alternative education appeared to have been more developed in the courses gain schools compared with the courses loss schools. While career education in general did not contribute strongly to the prediction of gain in the regression analyses, it was measured only by the one-time check-off. Hands-on or experiential business enterprise, career-education video, and/or field trip activities were found in virtually all of the gain schools.

Mail and phone services did not distinguish the gain schools from the loss schools, but home visits did. There were substantially more home visits in the attendance gain schools than in the attendance loss schools, and in the courses gain schools than in the courses loss schools. Thus, even though home visits correlated negatively with attendance and courses passed at the level of the individual student, they seemed to correlate positively with gain at a school level of analysis. (The contribution of home visits to students' attendance and passing courses is still far from being understood.) School-student conferences, individual guidance, and extended day were all reported as occurring more frequently in the gain schools than in the loss schools, while group guidance occurred more frequently only in the courses gain schools. The services that appear to have been more frequent in the gain schools tended to involve direct, personal contact with students, though this might not

apply to home visiting.

A more qualitative look at the individual DPP programs in the gain and loss schools revealed important patterns. In both sets of schools there were situations where one or another staff position had not been filled or was filled inadequately, but it was in the gain schools that this was dealt with more effectively, usually by someone else stepping in and meeting the need. Similarly, the gain schools coped more successfully with shortages of funds due to budgeting problems, or used other funds to supplement program monies. Support from the school administration was especially strong in several of the gain schools. Several of the gain schools were particularly inventive in their ways of gaining access to the students and, equally, of being accessible to students. Both counseling and career education, especially the enterprise activities, were seen as avenues for reaching students. The gain schools tended to have recorded more services that involved direct contact with students, though record keeping itself was not necessarily a priority with these schools. The DPP staff of the schools that gained appeared to be driven more by the goals of the program than by a need to conform to external expectations.

Program Costs and Cost-Effectiveness

Funding for the 1986-87 middle school Dropout Prevention Program came from two sources: state AI/DP reimbursable funds ($1,672,570), and the city's special DPP funding ($3,150,000). The total middle school allocation of $4,822,570 represents 35.4% of total program funding for the Dropout Prevention Initiative. Both the community school districts and the CBOs received increases in their allocations over Year One. District budgets averaged $467,997, with an average of $448,895 for each district in the PC model, $293,220 for each CBO, and $193,880 for each district in the CBO model (including the higher allocation to District 9 after its CBO contract was cancelled).

Districts varied considerably both in their spending levels and their expenditure rates. No district overspent its DPP budget. Average district expenditures were $452,079 in the CBO districts and $347,522 in the PC districts. The CBO districts spent a higher proportion of their budgets than did those in the PC model -- 93% vs. 78%, excluding District 9. Higher district expenditures were not associated with higher numbers of students served. In fact, because the schools in the CBO model served fewer students than did those in the PC model, per pupil expenditures in the CBO districts were higher than those in the PC districts ($1359 and $778, respectively).

Spending differences were largely related to initial differences in planned staffing, and later to staff vacancies, differences in the costs of staff hourly pay and OTPS,

bookkeeping/accounting variations among districts, and, to a slight degree, salary differentials for the same professional lines across districts (DPP budgets were figured on real salary estimates rather than unit costs). On the whole, DPP funds purchased the services of three to five full-time equivalent staff persons per school; part-time staff, such as after-school instructors, and non-personnel costs such as for attendance incentives or trips, were additional.

Since the DPP programs in the 29 middle schools had variation both in their program expenditures and outcomes, we used regression analysis to examine the relation between expenditures and three outcomes: change in attendance, change in proportion of courses passed, and change in reading scores. Although the relationship was in the expected direction for all three outcomes (i.e., more expenditures led to higher outcomes), only the relationship for attendance approached statistical significance. An incremental expenditure of $500 per student would be associated with a one percent increase in average attendance.

A regression analysis that entered the models into the equation with expenditures and outcomes found that an incremental dollar of expenditure would have the same effect for both models, although at a given level of expenditure, the attendance outcome in the PC model would be slightly (but not significantly) higher than in the CBO model.

Year Three

Teachers College is currently observing the implementation of the Dropout Prevention Program in 1987-88 and will at a later time report these findings together with the outcomes for Year Three. However, it is anticipated that DPP will continue in the middle schools in 1988-89, and so our recommendations at this point should take some cognizance of current developments in the program.

A complex process of planning within the Board of Education resulted in the Chancellor's Special Circular #37, May 8, 1987, which promulgated revised guidelines for the Dropout Prevention Program in 1987-88. The most far-reaching change for the program in the middle schools was prescribed for the alternative education component. Each school was to choose from among four models of alternative education: a mini-school, a block program, a remedial/enrichment teacher, or a district-developed model. While the lead time was very short, the Office of Student Progress initiated planning in the late spring and summer that resulted in a number of the schools and their districts becoming very involved. At the same time, however, Circular #37 had specified that compensatory instructional costs must be charged to Federal and State reimbursable programs and that mandated

alternative education programs could not be charged to AIDP (or DPP). The circular further prohibited pulling students out of classes for alternative education. At some point in this process, it was decided that Pupil Compensatory Education Needs (PCEN) funds would be used to pay for alternative education, and then it was realized that this required conformity to a variety of New York State guidelines that virtually prohibited the implementation of some of the plans that had been developed under the original four options. Many of the original plans were cancelled early in 1987-88. A PCEN remedial basic skills program is now being implemented in nearly all of the schools. However, distress over the cancellation of the original plans, delayed budgets, and staffing and scheduling problems not only affected the implementation of the PCEN alternative education component in a number of the schools, in some schools other components of the program were set back as well. Because of this, Year Three cannot be regarded as simply a year of consolidation. We expect the divergence of outcomes between different schools to be even greater than was found for Year Two, at the same time that there will be a first wave of new information about the effects of alternative education.

Recommendations

1. Schools in which the Dropout Prevention Program was more successful in Year Two took initiatives and used their resources creatively to solve problems. Each school should be encouraged to take charge of its own Dropout Prevention Program. This means that the Office of Student Progress should work in a more advisory capacity and that control over program decisions should be shared between OSP and the schools. A spirit of fostering options in the schools, which characterized the initial planning for alternative education in Year Three, needs to be maintained. At the same time, a much longer lead time is needed for successful planning than the schedule for implementing alternative education in Year Three has allowed.

2. Group guidance contributed significantly in Year Two to targeted students' attendance and passing courses, especially the latter. However, relatively few students received group guidance on a regular basis. Furthermore, little is known yet about what form group guidance took in the different schools where it was used. The Dropout Prevention Program is encouraged to explore group guidance more deliberately. Schools that elect to implement or expand group guidance should be furnished with staff development, through a CBO or the Board of Education as appropriate. How group guidance is used in the different schools and its different results should be studied collaboratively with the schools. Group guidance requires administrative support for staff development and to negotiate the pull-outs of students that are usually necessary.

3. Experiential or hands-on career education activity was found in nearly all of the gain schools. In at least some of these schools it was observed to be a medium through which staff could connect positively with students and students could exercise responsibility and could interact cooperatively with one another. Ironically, career education has been nearly abandoned in the middle schools in 1987-88, and a remedial basic skills program put in its place, in part because DPP staff in many of the schools rebelled against a paperwork curriculum in career education that OSP attempted to implement in 1986-87. Staff need to be allowed to do what best enables them to involve students in constructive interpersonal activity. Alternative education in 1988-89 should include an experiential career education option for those schools where it meets both the needs of targeted students and the resources of DPP staff.

4. The effects of the PCEN alternative education program on outcomes for targeted students in 1987-88 will not be known for the program as a whole until the fall, but staff within schools may have some insight into this beforehand. The schools and OSP should balance the desirability of waiting until the general results are known and the need to follow through on plans that have already been made, including to make improvements in the supplementary instruction that is already in place. (A year ago, the evaluation recommended that ways be sought to "help students and teachers connect academically," specifically students returning to school from an absence. Schools will need to see if the PCEN classes are a help or a hindrance to this connection.) To the greatest extent possible, OSP's role should be to facilitate this process of improvement, orienting to judgments in the schools about what strategies have the greatest prospect for success.

5. OSP's regular collection of data for monitoring students' attendance and staff's services to students has produced valuable information. The attendance data should continue to be collected every day and transactions with students and their families should be recorded. However, services could be summarized for external review less often and still allow scrutiny of how services are being distributed to different categories of students. The full MSSR should be used only in alternate months, at most, to allow staff in the schools more time to study the data already being collected and to undertake more of their own inquiries into what services are needed. Along with the feedback of MSSR data from OSP, information should be provided to the schools directly from the evaluation to further enable the responsible parties in the schools to set goals and plan how to accomplish them.

6. Few students actually drop out of the middle schools, but the trajectories of absence and course failure that lead to dropping out remain largely unchanged in the DPP middle schools overall.

The dropout problem seems to be much bigger than the Dropout Prevention Program in the middle schools at this time. It may be that various elements of the program now in place will be important in a solution to this problem, as they appear to have been in the schools where there were exceptional gains in Year Two. What seems to be lacking most can be summarized as communication and impowerment. Obstacles lie in the paths between the middle school and the high school, the school and the family, the school and the community-based organization, the school and the health agency, indeed even the school and the Board of Education. As much effort as the Dropout Prevention Program has already invested in trying to overcome these barriers, there needs to be a different quality of communication and sense of control between the school and these other institutions that have the potential to affect the students' lives. We suggest that dropout prevention be approached as a problem requiring open communication first of all: between the school and other agents as well as between the school and its own students. Adopting a recommendation from Chancellor Green's inaugural address, we think the best place to begin in a number of the schools is with increased communication between the Dropout Prevention Program staff and the school principal.

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Chapter One

INTRODUCTION AND BACKGROUND

The 1986-87 school year was the second full year of implementation of the New York City Dropout Prevention Initiative. This evaluation report focuses exclusively on the middle school programs that are part of the Initiative, and presents data on middle school student characteristics, program services, and outcomes for the Initiative's second year. (In an Interim Report published in September, 1987, we reported on the status of high school and middle school program implementation during Year Two, along with a preliminary examination of middle school service delivery and an analysis of students who had dropped out of school during the program's first year.)

Program Background

The Dropout Prevention Initiative was established in 1985 by the New York City Board of Education, the City's Office of Management and Budget, and the Mayor's Office of Youth Services, with over $30 million in special city funding for the first three years of program operation.

As in the previous year, 29 middle schools and 13 high schools were involved in the Initiative during 1986-87, including 10 high schools and 29 middle schools from the Board of Education's Dropout Prevention Program (DPP) and 3 high schools from the state-funded Attendance Improvement/Dropout Prevention Program (AIDP). The middle school DPP programs were managed through the Office of Student Progress. These middle schools had all been part of the state-sponsored AI/DP Program during the 1984-85 school year, and were selected to participate in the DPP portion of the Dropout Prevention Initiative because records indicated that they were the primary feeder schools into the 10 DPP high schools.

The Initiative has been organized to provide intervention services for students at risk of dropping out of school, and to test the effectiveness of various modes of service delivery. Schools vary along two dimensions in their program designs -- the types of services given, and the providers of services. At the middle school level, all schools provide case management services for targeted groups of at-risk students. Their program designs vary by the type of service provider. In fifteen middle schools, personnel hired by the Board of Education provide program services. These fifteen schools are referred to in this report as the Project Connect (PC) model; although this name is no longer used in the schools, we continue to use it for the sake of consistency with earlier reports. Fourteen middle schools have been part of the CBO-based model, in which services are provided by Board of Education personnel and by community-based

organizations contracted by the local community school districts. During 1986-87, one of the community school districts canceled its contract with a CBO, and the three schools in that district changed over to the Project Connect model. In the chapters that follow, these three schools will be excluded from analyses at the model level, since they did not fall clearly into one model or the other (Table 1-1).

Most students who participate in the Dropout Prevention Initiative are selected on the basis of prior year attendance problems. Secondary eligibility criteria are also used to select students for the program; these include having failed two or more major subjects, having excessive latenesses, reading below grade level, and being overage for grade. In middle schools, students in the two highest grades of a school are eligible for the program.

The Dropout Prevention Initiative provides for the delivery of a range of services to middle school students through six program components. These are:

(1) Program Facilitation. This component is designed to ensure that the progress of the program as a whole, as well as that of individual students in the program, is being monitored. Each school has a program facilitator or coordinator; in most schools, this was a part-time position during 1986-87. The coordination of the different program elements, and the monitoring of their impact on individual students, are accomplished through a Pupil Personnel Committee.

(2) Attendance Outreach. Student attendance is monitored and followed up on through letters, phone contacts, and home visits. Incentives such as prizes, awards, or special activities are provided to encourage attendance improvement.

(3) Guidance and Counseling. Group, individual, and career guidance are provided to students, with the intent of addressing individual problems that may contribute to poor attendance.

(4) Health Services. This component consists of diagnostic screening, including physical, psychological, and educational assessment, as well as appropriate referral services where necessary.

(5) School-Level Linkages. The goal of this component is to help middle school students make smooth transitions into high school. Activities include visiting high schools and engaging in a variety of activities with high school students and/or staff.

(6) Alternative Educational Programs. High interest educational programs that supplement regular instructional services are provided to students. These may include peer-

TABLE 1-1

Middle Schools Participating in the Dropout Prevention Initiative
Year Two, 1986-1987

Community School District	School	Program Model*	Community-Based Organization
3	IS 44	CBO	Rheedlen Foundation
	JHS 54		
	JHS 118		
7	IS 139	PC	--
	IS 162		
	IS 183		
9	JHS 22	**	Touro College
	JHS 117		
	JHS 147		
10	JHS 45	PC	--
	JHS 118		
	JHS 137		
14	IS 49	PC	--
	JHS 50		
	JHS 318		
15	IS 51	CBO	Good Shepherd Services
	JHS 88		
	JHS 142		
17	IS 61	PC	--
	IS 320		
	IS 390		
19	JHS 166	CBO	Colony-South Brooklyn Houses
	IS 292		
	IS 302		
27	IS 53	CBO	Federation Employment and Guidance Services (FEGS)
	JHS 198		
32	JHS 111	PC	--
	JHS 291		
	JHS 296		

* CBO = Community-Based Organization model, employing both Board of Education and CBO personnel
PC = Project Connect model, employing Board of Education personnel only

** District 9 schools were part of the CBO model until March, when the contract with Touro College was cancelled and they became part of the Project Connect model.

tutoring and other methods of individualized instruction, extra-curricular activities related to career training, recreational or cultural activities designed to encourage better attendance and improve achievement, or special classes.

Program Evaluation

On April 1, 1986, the Institute for Urban and Minority Education at Teachers College, Columbia University, began a three-year evaluation of the Dropout Prevention Initiative, under a contract with the Board of Education. As stated in the Request for Proposals for the evaluation contract, the evaluation of the Dropout Prevention Initiative is designed to measure program effectiveness in terms of five general objectives:

a) the effectiveness of the Initiative in improving attendance and reducing dropouts in the schools overall and for targeted students in particular;

b) the relative effectiveness of the different models of service delivery;

c) the relative effectiveness of schools within each model;

d) the appropriateness of specific services for different types of students; and

e) the relative cost effectiveness of each service delivery model.

Three previous evaluation reports have been published prior to the present volume. They are Interim Report for Year One (July 25, 1986), Final Report for Year One (January 23, 1987), and Interim Report for Year Two (September 14, 1987). (All are available from the Office of Educational Assessment at the New York City Board of Education.) These reports have provided qualitative analyses of the factors which affect program implementation and service delivery, and have described early outcomes of the program, particularly in terms of students' attendance, numbers of courses passed, standardized test scores, and persistence in school.

The Final Report for Year Two is being produced in two parts. The current volume analyzes the services delivered to middle school students and examines program outcomes from a variety of perspectives.

Summary of Year Two Middle School Program Implementation

By June, 1987, the implementation of the Dropout Prevention Initiative was found to have reached a stage of routine activity for most of the components in most of the middle schools --

"routine" meaning that activity occurred on a regular basis, procedures were set, and staff knew their roles, but also that few major changes were being considered. This was a substantial development beyond the Initiative's first year, when more activities were in start-up phases. At the same time, relatively few components were being scrutinized within schools for refinement or for larger, more general changes, except for those for which the Office of Student Progress initiative program-wide changes toward the end of the year.

Program facilitation occurred daily from the beginning of the school year in most middle schools. Under attendance outreach, a variety of strategies were utilized to interact with families and students concerning student absences. All middle school programs conducted home visits, generally on a daily or weekly basis. Several schools instituted "positive home visits." Twenty-two of the programs made phone calls to homes on a daily basis; this activity was more prevalent in the Project Connect than the CBO-based programs. Incentives (awards, trips, etc.) were used to encourage and reward student attendance with about equal frequency in the two middle school program models.

Nine of the fifteen Project Connect middle school programs provided individual guidance on a daily basis, as did thirteen of the fourteen CBO-based programs. Nine of the PC and all of the CBO programs provided group counseling services. (In some schools, the DPP staff did not include personnel who were licensed or certified for counseling, so that although some counseling may have taken place, it was not reported as such.) Nine middle schools offered some form of parent-oriented counseling, including individual counseling, parent workshops, and a job referral program for parents.

Health services were available to middle school DPI students in all but three CBO and five PC schools. Most health activities are not specifically sponsored by the Dropout Prevention Initiative; instead, special efforts are made to see that targeted students have access to existing health services. In general, middle schools with CBO-based programs tended to offer a wider range of health services.

School level linkages between middle schools and high schools were available to students in most middle school programs. Eleven CBO schools and all fifteen PC schools had tours or orientation sessions at high schools. Several schools reported as many as six different linkage activities, but 16 schools reported only one activity under this component.

Career education was by far the most prevalent alternative educational program in the middle school programs, offered by twelve of fifteen PC schools and eight of fourteen CBO schools. Ten PC schools provided an enterprise program (typically a "mini-business" where students made candy, buttons, or the like to sell), while only three CBO schools did so. On the other hand, ten CBO schools reported recreational activities for students,

while fewer PC schools did so.

The quality and extent of middle school program implementation appeared to depend on several key factors. One was the timing of budget approval and the availability of resources, a problem in a third or more of the middle schools. In several cases, for example, money for trips, awards, or other non-payroll purposes had to come out of a staff member's own pocket or another school fund until program funds were released for use. A second factor was the availability of staff. In several schools, Board of Education guidance counselors were not hired until mid-year, restricting programs' ability to provide services to students. There were similar problems with CBO staffing as well.

School-CBO relations was another factor affecting program implementation. In five of the fourteen schools in the CBO model, relations between the two were reported to have worsened in the second year of the Initiative, and in two more schools, poor relations in the first year continued through the second year (three schools eventually cancelled their contract with a CBO). Personnel changes in both schools and CBOs sometimes strained relations between the two organizations and prevented the collaboration from moving forward. A school's willingness or reluctance to incorporate a CBO into its program was expressed in many ways, ranging from providing space to referring students to restricting the kinds of contact a CBO could initiate with students.

Staff quality was an important variable in the constellation of factors determining program implementation. At all levels of staffing, from family assistants to program supervisors, the skills and commitment of individuals involved had an impact. Unfortunately, the level of training and staff development provided to program personnel at the middle school level was low at many sites, and there were few opportunities for staff to meet together to share skills and expertise. Additionally, many program staff, particularly facilitators, reported not having enough time to perform their job responsibilities.

Finally, a school's overall commitment to the Dropout Prevention Initiative affected its ability to implement a program. In general, middle school personnel expressed more reservations about their dropout prevention programs than high school personnel did, questioning in particular the career education component and the involvement of CBOs. These attitudes may have been partly the result of middle schools' lack of participation in the initial adoption of the Initiative at the local level. The support of the school principal was an important aspect of school commitment, and in only twelve of the twenty-nine middle schools were principals characterized as highly supportive of their programs.

Chapter Two

CHARACTERISTICS OF MIDDLE SCHOOL STUDENTS PARTICIPATING IN THE DROPOUT PREVENTION INITIATIVE, 1986-87

Introduction

This chapter summarizes statistical data on the background characteristics of middle school students who participated in Year Two of the Dropout Prevention Initiative (DPI). In a later chapter, we will present program outcomes at the student, school, district, and model levels, and discuss the relationships among student background characteristics, program services, and outcomes.

Year Two Participants: Schools and Students

Schools. In 1986-87, all 29 middle schools continued the Dropout Prevention Programs which they had begun the year before. Fifteen of these schools continued with the school-based Project Connect (PC) model, while the other fourteen schools utilized the CBO-based (CBO) model. However, the CBO contract between Touro College and District 9 was dropped mid-year, and the three middle schools in that district subsequently switched to the Project Connect model. These three schools had some degree of a program throughout the school year, with services to students documented on the MSSRs and budgets in place for Board of Education personnel. Thus, they will be included in many of the following analyses, but, are excluded from analyses considering differences between the program models. Given the changes which the District 9 schools underwent, it did not seem appropriate to include them as representing either one or the other model.

Students. The following criteria (noted in Chancellor's Special Circular #25) were intended to be used to select students eligible for program participation:

1. 30-74 absences in 1985-86 school year
2. 15 or more absences in spring 1986
3. 25-29 absences in 1985-86 and one or more of the following high risk indicators:
   a. reading 1 or more years below grade level
   b. 2 or more major subject failures
   c. 20 or more latenesses
   d. 20 or more half-day absences
   e. overage for grade
   f. LEP entitled
4. participated in the 1985-86 dropout prevention program but are not longer eligible due to improved attendance.

(Additional criteria were specified if programs could not fill

their rosters on the basis of the above criteria.)

Under program guidelines set by the Office of Student Progress, each middle school program in the Project Connect model was expected to target services to 150 students. The situation was somewhat more complicated in the CBO-based model. The community-based organizations were contracted to serve at least 100 students, and the BOE personnel in these schools were expected to serve 50. It was left open whether these 50 students would be in addition to or included in the 100 served by the CBOs, and whether and how BOE and CBO staff would integrate their services to students. In Districts 3, 15, and 19, the CBO and BOE staff served the same students, while in District 27, the BOE and CBO staff served different students.

According to the Office of Educational Assessment and the Office of Student Progress, who collected data on students, a total of 3922 middle school students participated in the Dropout Prevention Program at some point during 1986-87. (Ninety-one additional students were served by the CBO in School 23, but since little data were provided on these students, they are not included in the overall analysis.) Table 2-1 shows the number of program participants per school.

It must be noted that the schools' active lists of program participants changed from month to month, as students entered and left schools and the DPP program. OEA records show that 6.8% of the targeted students entered the program after January, and that 14.3% left the program before the end of the school year, presumably because they transferred out of the schools they were enrolled in. Further, the reports of monthly services to students (MSSRs) show different students receiving services in November, February, and May -- the months for which data were available to the evaluators. Not all of these students whose names appear on MSSR forms were recorded on the official program roster from OEA/OSP. The following figures provide some indication of the extent of mobility among the active student population:

Total number of program participants (from OEA/OSP): 3922
Total number of students with at least 1 MSSR: 4077
Students with at least 1 MSSR, but not on OEA/OSP list: 695
Number of students with November MSSR: 3323
Students with November MSSR only: 209
Number of students with February MSSR: 3415
Students with February MSSR only: 75
Number of students with May MSSR: 3581
Students with May MSSR only: 338
Students with 2 of 3 MSSRs: 668
Students with all 3 MSSRs: 2787

Data Collection

Statistical information on middle school program participants was obtained from two sources. Computerized files

TABLE 2-1

Program Enrollments in DPP Middle Schools, 1986-87

School Code	Total School Register	DPP Students	% of School	DPP Students by Grade 7th	8th	9th
14	600	130	21.7%	51	79	
15	662	131	19.8	51	78	2
16	995	101	10.2	38	63	
17	1403	164	11.7	104	60	
18	1495	174	11.6	80	94	
19	1258	99	7.9	55	44	
20	865	147	17.0		80	67
21	834	143	17.1	66	77	
22	853	110	12.9	24	35	51
23	843	140	16.6		22	27
24	1281	137	10.7	68	69	
25	1300	161	12.4	82	70	4
26	1524	234	15.4	144	90	
27	1020	102	10.0	14	47	41
28	761	172	22.6	55	116	1
29	1165	160	13.7	74	85	1
30	1150	114	9.9		65	49
31	1576	133	8.4	53	80	
32	912	106	11.6	25	39	42
33	1248	156	12.5		49	107
34	826	95	11.5	50	45	
35	808	146	18.1	8	53	85
36	1658	156	9.4	64	91	1
37	820	115	14.0	50	65	
38	999	152	15.2	67	85	
39	745	175	23.5	39	79	64
40	1118	106	9.5	2	41	63
41	978	150	15.3		74	76
42	753	104	13.8	30	38	36

from the Board of Education's Office of Student Information Services (OSIS) were used for data on student age, dates of school enrollment and/or discharge, attendance history, language competence, and standardized test scores. Program personnel at the school level provided data (from school records that are not computerized centrally) on program eligibility, dates of program enrollment/discharge, services received, and numbers of courses passed and failed in 1985-86 and 1986-87. These data were compiled on computer tapes by the Office of Educational Assessment.

The problem of missing data has proven to be a major obstacle in the analysis of data on middle school students. Although the records for students who remained active in the program through June, 1987, were nearly complete, large numbers of other cases were missing one or more items of information. Following are the numbers and percentages of students with missing data in each category:

Total number of students in computer file: 3922

Missing 1985-86 attendance data: 772 (20%)
Missing 1986-87 attendance data: 621 (16%)
Missing either 85-86 or 86-87 attendance data: 1177 (30%)
Missing data on 1985-86 courses: 164 (4%)
Missing data on 1986-87 courses: 555 (14%)
Missing either 85-86 or 86-87 course data: 653 (17%)
Missing 1986 DRP score (reading test): 686 (18%)
Missing 1987 DRP score: 823 (21%)
Missing 1986 MAT score (math test): 597 (15%)
Missing 1987 MAT score: 1487 (38%) [this includes 98.7 of the ninth graders]

Such a large percentage of missing information weakens the strength of the conclusions which can be drawn from the data. For instance, most of the students for whom attendance data are unavailable are students who transferred out of their schools before the end of June; it is conceivable that such a group differs significantly from the students who remained in school to participate in the program for the full year. We examined whether students who were missing data on one variable looked different from other students on a variable for which there was full data. We found that students who were missing 1986-87 attendance data but had courses passed data had a significantly lower rate of passing courses in 1986-87 (58%) than students for whom both attendance and courses passed data were available (71%). In this case, the available data on attendance in 1986-87 probably overestimates the attendance of the entire population of targeted students.

Characteristics of Targeted Middle School Students

A total of 3922 middle school students were identified as DPP program participants. Of these students, 51.7% were males and 47.9% were females (see Table 2-2).

TABLE 2-2

Background Characteristics of Program Students DPP Middle Schools, 1986-87

SEX			
	Male	2015	(51.7%)
	Female	1879	(48.3%)
	(Missing)	28	
		3922	(100%)
GRADE			
	7th Grade	1286	(32.8%)
	8th Grade	1913	(48.9%)
	9th Grade	717	(18.3%)
	(Missing)	6	
		3922	(100%)
AGE			
	12 or younger	360	(9.2%)
	13 years old	1184	(30.4%)
	14 years old	1378	(35.3%)
	15 years old	800	(20.5%)
	16 or older	178	(4.6%)
	(Missing)	22	
		3922	(100%)
OVERAGE			
	Not overage	1331	(34.1%)
	1 yr. overage	1553	(39.8%)
	2 yrs. overage	866	(22.2%)
	3+ yrs. overage	150	(3.8%)
	(Missing)	22	(.1%)
		3922	(100%)

LIMITED ENGLISH PROFICIENT (LEP)

(Based on Language Assessment Battery scores)

>20th %ile (non-LEP)	94	(2.4%)
<20th %ile (LEP)	151	(3.9%)
Students who took test	245	(6.3%)

Grade. Almost half (48.9%) of the DPP students were enrolled in the eighth grade. About one-third of the DPP students (32.8%) were enrolled in the seventh grade, and 18.3% were in the ninth grade.

Age. Student age was calculated by subtracting the year of a student's birth from 1986, the beginning date of the current school year. The median age of targeted students was 13.8 years. Slightly under a third (30.4%) of the DPP students were 13 years old, 35.3% were 14 years old, and 20.4% were 15 years old. Of the remainder, 9.2% were age 12 or younger, and 4.6% were 16 years or older. Students who were overage for their grade level were identified by comparing the expected age for grade level with actual age. As can be seen in Table 2-2, 22.2% of the students were 2 years overage for grade level, while 3.8% were three or more years overage for grade level.

Language proficiency. Only 245 (6.2%) of the 3922 DPP students were administered the Language Assessment Battery (LAB), the Board's language proficiency exam. Students who score lower than the 20th percentile on the LAB are considered to have limited English proficiency. Of the 245 students who took the exam, 61.6% (representing only 3.9% of the entire group of targeted DPP students) had test scores below the 20th percentile. However, we consider these results to be somewhat misleading, since it is quite plausible that some of the many students who did not take the exam also have limited English proficiency. The Teachers College survey, completed by 44% of the students in the OEA sample during the spring semester, found that 18% of the respondents said they spoke a language other than English with their friends, 34% said they spoke a language other than English at home, and 46% said they lived in homes where a language other than English was spoken by the adults. Thus, it seems likely that 3.9% is an underestimate of the proportion of students in the OEA sample who have limited English proficiency.

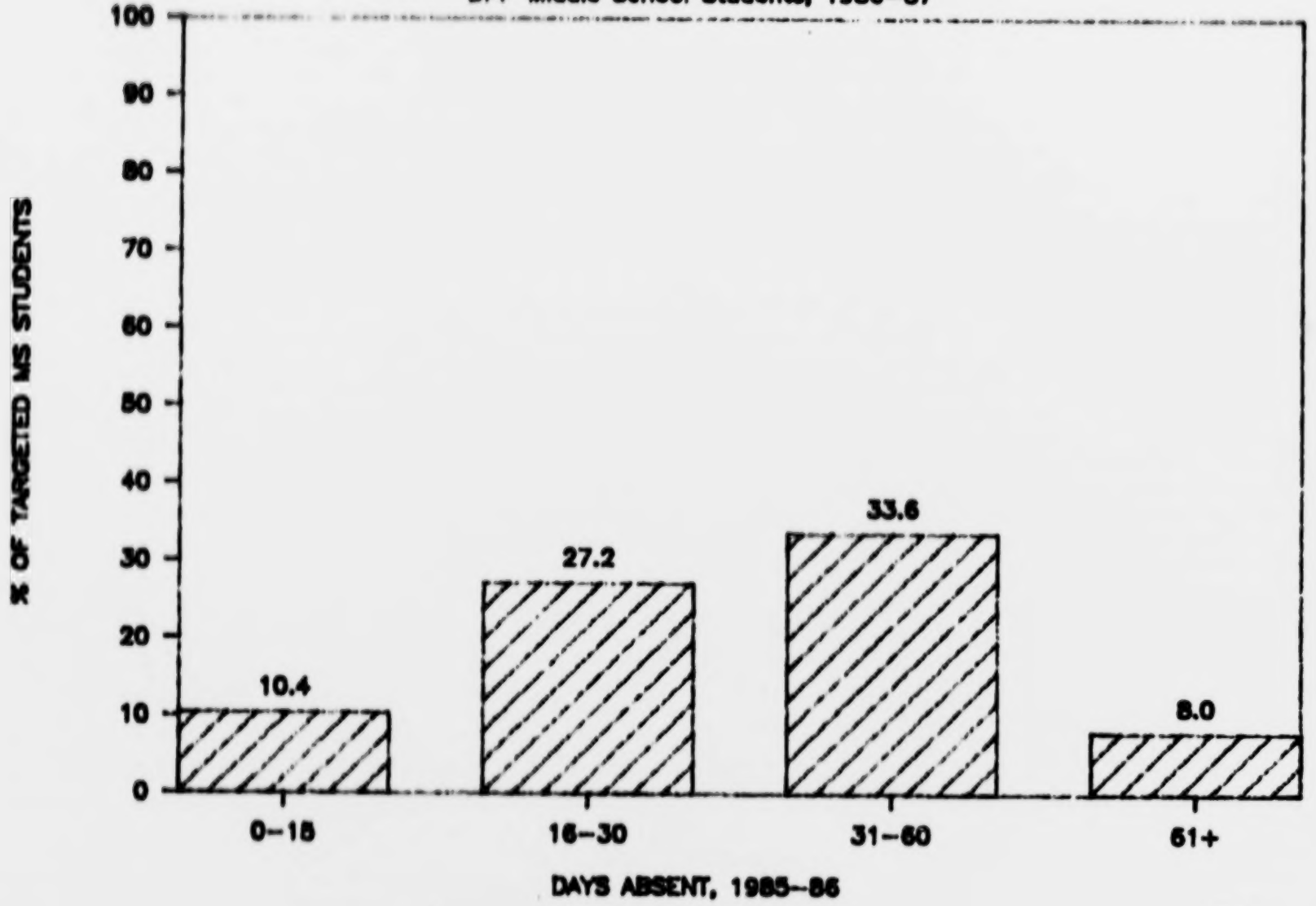
Prior year attendance. Overall, the average prior year (1985-86) attendance rate for Year Two targeted students was 78.0%. This figure represents the number of days present in 1985-86 divided by the sum of days present and days absent, averaged across all targeted students. Over a full school year of 180 days, a 78.0% attendance rate would represent 140 days present and 40 days absent. Prior year attendance was higher in the fall (81%) average than in the spring semester (74.2%).

Figure 2-1 presents the distribution of prior year absences for Year Two targeted students. The majority of students (60.8% of all students or 76.7% of those with complete data) missed between 16 and 60 days in 1985-86. Slightly less than a third of all students (27.2%) missed 16-30 days of school in 1985-86, and 33.6% more missed 31-60 days. Only 10.4% of all students missed fewer than 16 days in the 1985-86 school year, while 8% missed more than 60 school days. (Data were missing for 21% of the 3922 students; it is likely that many of these had relatively low prior attendance.)

Figure 2-1

PRIOR YEAR ABSENCES

DPP Middle School Students, 1986-87



Note: Data were missing for 21% of the students.

Prior year courses passed. Information concerning the number of prior year courses passed and failed appears to have been reported inconsistently from school to school. Most middle schools reported a total of 4 or 5 courses per student, which corresponds to the OEA request that grades be reported just for "major subjects" (construed as language arts, mathematics, social studies, science, and sometimes foreign language). However, a few schools reported 6 or 7 courses per student, and two schools reported a total of more than 10 courses per student (Schools 24 and 31). For this reason, this report generally presents analyses of the proportion rather than the raw numbers of courses passed and failed by DPP middle school students. One school (School 23) did not report the number of courses passed and failed for 1986-87 and this information could not be recovered for the students who have subsequently matriculated to high school. The students in this school were excluded from the following analyses of grades.

The mean proportion of 1985-86 courses passed was 64.7%. In other words, the average DPP student passed about two-thirds of his or her major subjects during the year prior to program participation. As can be seen in Figure 2-2, one-third of the students (33.4% of all students or 34.9% of those with complete data) did not fail any courses in 1985-86. Almost half of the students (44.4% of all students, 46.4% of those with full data) failed two or more major subjects, which is a secondary eligibility criterion for entering DPP, and 11.1% failed all their courses. One-sixth (15.5% of the total population) of the students passed more than 4 courses in 1985-86. (Prior course data were missing for 4.2% of all students.)

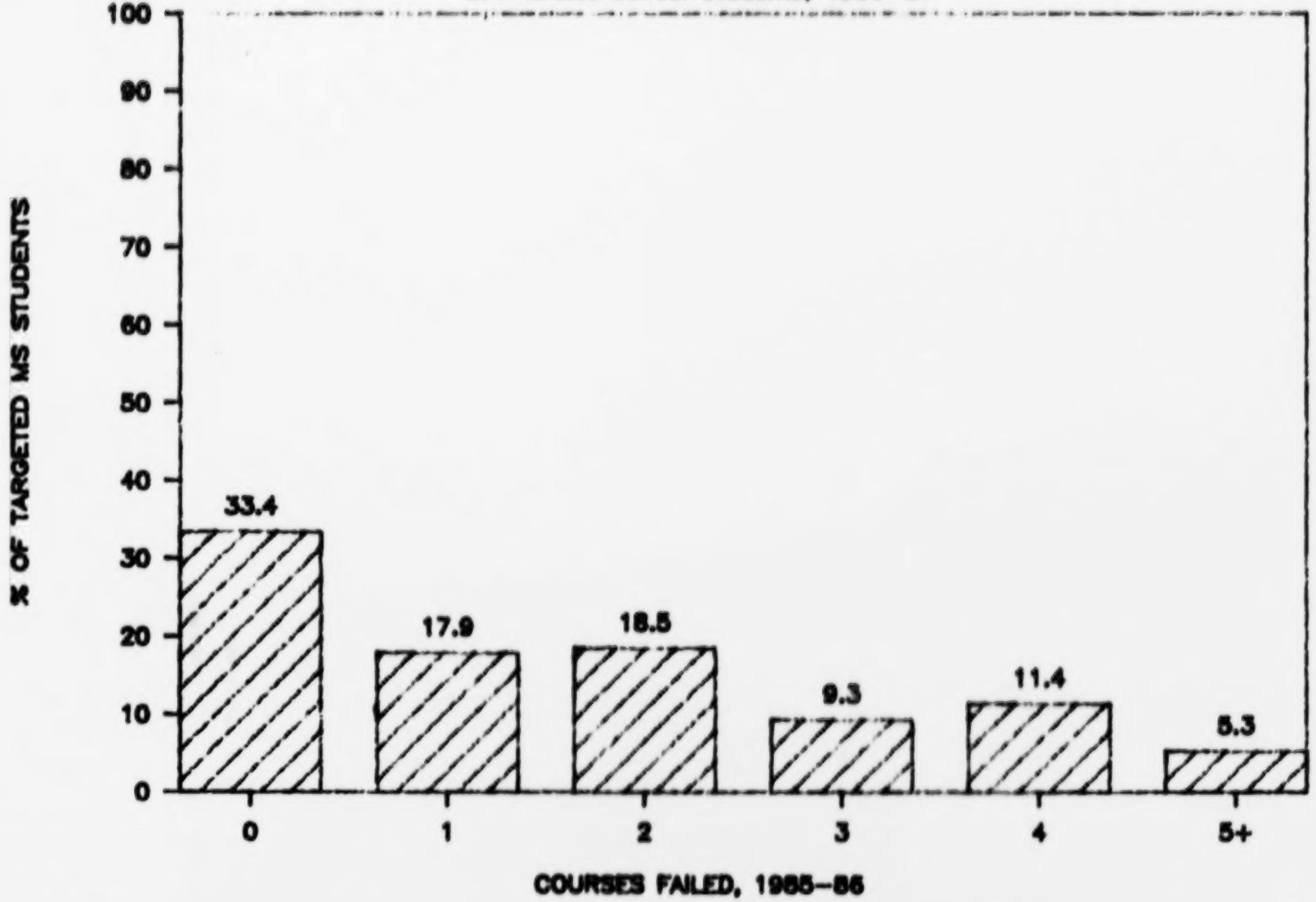
Standardized test scores. An important student background characteristic, and one of the risk indicators used to determine whether students were eligible to be served by the Dropout Prevention Program, was having a reading score one (1) or more years below grade level. Unfortunately, scores on the DRP (Degrees of Reading Power) test, the standardized test used by the Board of Education to measure reading achievement, are not reported in grade-equivalent form or in percentile scores that correspond to agreed-upon reading levels. It is our understanding that the middle schools use different cut-off scores, ranging between the 32nd through 35th percentiles on the DRP, to mark student reading levels of two years below grade. The cut-off point used in this report is the 35th percentile on the DRP. Since a score at the 35th percentile seems somewhat high for students who read two years below their grade level, we will refer to this cut-off point as "reading at a low level" rather than as "reading two years below grade level." On the basis of their prior year DRP scores, 33.5% of all the Year Two students (40.5% of those with full data) were found to read at a "low level," i.e., below the 35th percentile.

Data on students' prior year scores on the MAT, the standardized test of mathematics achievement, were available for 85% of the targeted students. Overall, the average percentile

FIGURE 2-2

PRIOR YEAR COURSES FAILED

DPP Middle School Students, 1986-87



Note: Data were missing for 21% of the students.

score on this test was 28.1. However, since there are no formal or informal criteria for determining MAT achievement levels below grade level, and since it is not used in determining student eligibility for DPP, we did not attempt to identify the percentage of students below grade level on this test for either the 1986 or 1987 test administration.

Reasons for program enrollment. Middle school program personnel reported the eligibility criteria under which students were enrolled in the Dropout Prevention Program (Figure 2-3). One criterion was reported for each student, although clearly many students fit into more than one category of eligibility. Over 80% of the targeted students were reported to have met the primary program eligibility criteria of 30-74 prior year absences or 15+ prior spring absences. Other students entered the program because they had slightly better prior attendance (25-29 absences) but also met at least one of the program's secondary eligibility criteria. These criteria included reading below grade level (1.2%), failing 2 or more major subjects (.9%), having 20 or more latenesses (1.4%), having 20 or more half-day absences (.1%), being overage for grade (.5%), or being LEP entitled (.1%). An additional 8.8% of targeted students were enrolled because they met two or more of the above secondary eligibility criteria without meeting an attendance criterion, 3.0% were enrolled because they had participated in the program the previous year, 2.4% because they had been LTAs but were coming to school, and 1.1% because their September, 1986, attendance indicated they might become LTAs.

Program eligibility and levels of risk. The figures cited above refer to check-off data reported by DPP staff, which gave the single reason for why each student was enrolled in the program in 1986-87. We also examined other data to assess students' eligibility under the various program eligibility criteria, and to assess how much at risk the students were.

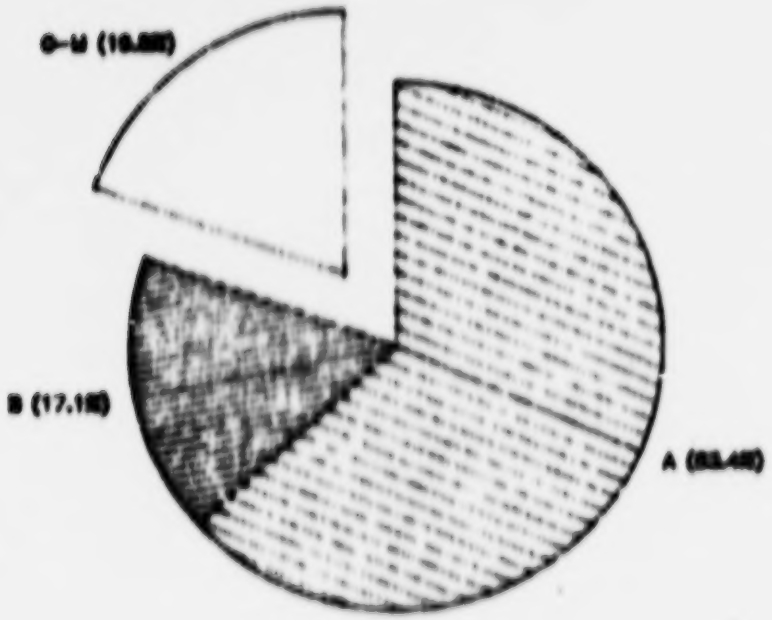
Using attendance data supplied by OEA, we found that 1510 students met the first attendance criterion for program eligibility, 30-74 prior year absences. This represents 38.5% of the total middle school program population of 3922, and 47.9% of the students for whom there were complete attendance data (data were missing for 19.7% of the students). DPP staff had reported that 63.4% of the students met this criterion. A small number of students (1.8% of the total population) were absent more than 74 days in 1984-85, while a large proportion of students (37.6%) had fewer than 30 prior absences.

The second attendance criterion was 15 or more absences the prior spring term; 1941 students met this criterion, representing 49.5% of the total population (data were missing for 14.2% of the total). We found a large overlap between the two groups: 1288 students had both 30-74 prior year absences and 15+ prior spring absences. Thus, 2163 students (55% of the total) met at least one of the two primary attendance criteria for program eligibility, including 38% who met the first criterion, and 17% who met the second criterion. These 2163 students represent

FIGURE 2-3

DISTRIBUTION OF REASONS FOR ENROLLMENT

DPP Middle School Students, 1986-87



Code	% of Targeted Students	Description
A	63.4 %	30-74 absences in 1985-86
B	17.1	15 or more absences in Spring 1986
C	1.6	25-29 absences and in '85-86 AIDP/DPP
D	1.2	25-29 absences and DRP below 35th %ile
E	0.9	25-29 absences and failed 2+ major subjects
F	1.4	25-29 absences and 20+ latenesses
G	0.5	25-29 absences and overage for grade
H	0.1	25-29 absences and 20+ half-day absences
I	0.1	25-29 absences and LEP-entitled
J	1.4	22-25 absences and in '85-86 AIDP/DPP
K	8.8	Meets 2 or more secondary eligibility
L	2.4	1985-86 LTA and in school 10+ days since Sept. 10
M	1.1	Non-LTA in '85-86 and absent 10+ days in Sept.

approximately 65% of the sample for whom 1985-86 attendance data were available. This figure is not as high as the 80% reported by DPP program staff as having met the first two criteria; however, it is likely that some of the students with missing data on the OEA system would actually meet these criteria.

The program guidelines specified several secondary eligibility criteria that could be used to enroll students whose prior attendance was somewhat better, i.e., 25-29 absences. These included being overage, having reading ability below grade level, 2 or more major subject failures, 20 or more prior year latenesses or half-day absences, or LEP entitlement. In examining OEA data on these secondary criteria one at a time (and keeping in mind the serious problem of missing data), 860 students were found to be two or more years overage for grade, 1139 had reading scores below the 35th percentile, 1508 had failed two or more major subjects, 834 had 20 or more prior latenesses, 151 had 20 or more prior half-day absences, and 127 were considered LEP (limited English proficient).

In each case, some students who met the secondary criterion also met a primary attendance criterion (30-74 prior year absences or 15+ prior spring absences), while others did not. Of the 860 overage students, for example, 605 also met an attendance criterion. These 605 students represent 15.4% of the total program population, meaning that this percentage was doubly at risk by virtue of being overage and having poor prior attendance. Similarly, 18% of all students were found to be at risk in terms of poor prior attendance and low reading ability, 26.6% by virtue of poor prior attendance and 2 or more major course failures, 7.1% because of prior attendance and latenesses, 3% because of prior attendance and half-day absences, and 1.6% due to prior attendance and LEP status.

Conversely, 255 students, or 6.5% of the total population, were overage but did not meet one of the primary attendance criteria. Similarly, the proportions of students who were found to have met the other secondary eligibility criteria but not a primary attendance criterion are the following: 10.9% (of the total population, not just those with full data) for low reading ability, 11.9% for 2 or more failures, 6.5% for 20+ latenesses, .9% for 20+ half-day absences, and 1.6% for LEP. It is entirely possible that some of these students had 25-29 prior absences, thus the figures which DPP program staff gave (cited above) for students eligible under the secondary criteria may be plausible.

When the five secondary criteria were taken together, a total of 933 students met at least one of them, regardless of their prior attendance. Over half (582) of these students met two or more secondary criteria. Full data for this analysis were missing on over 69% of the total population. However, since 62% of the students with full data met at least two of the secondary criteria, it is reasonable to assume that a similar large proportion of the total population did also.

Prior participation in an AIDP or DPP program could be

construed as a risk characteristic, since it would indicate that students met eligibility criteria for at least two consecutive years. Of the 3922 students participating in the Dropout Prevention Program in 1986-87, 648 (16.5%) were identified as having been in the program the previous year.

Student Differences Compared Across Schools

As was noted in the Final Report for Year One, in 1985-86 the 29 middle schools served populations which were at very different risk levels, according to prior year attendance and achievement data. In Year Two, schools similarly appeared to target students at different levels of risk. Figure 2-4 shows prior year (1985-86) average attendance rates for the targeted populations in each school. These figures range from a high of 85.2% days attended in School 21, to a low of 69% in School 34. Table 2-3 shows the number of students in each category of prior attendance, by school.

Figure 2-5 shows average prior proportion of courses passed, with a range from 43.7% in School 18 to 87.3% in School 23. On the low end of the scale were School 18 (43.7% average of courses passed), School 34 (47.3%) and School 29 (48.9%). On the other hand, there were schools in which targeted students passed over 85% of their 1985-86 courses (School 23 with an 87.3% pass rate and School 35 with 85.1%).

There were also large differences among schools in the number of targeted students overage for grade. School 15 had the largest population of overage students (45%), while school 33 had the smallest proportion of overage students (8.3%).

Prior year student achievement in reading and math, as measured by scores on the DRP and MAT standardized achievement tests, respectively, showed marked differences among schools. As can be seen in Table 2-4, students in three schools started with very low mean DRP scores (30.9 in School 15, 33.0 in School 34, and 34.2 in School 29), while students in three other schools started with exceptionally high mean DRP scores (50.4 in School 30, 50.3 in School 35, and 54.4 in School 33). As for prior year MAT scores, School 32 had a much lower average MAT score than the other schools (18.7), while the average MAT percentile score in 1986 was 28.1. School 25 had the highest mean MAT score in 1986 (M=35.6).

Differences in Student Characteristics Across Districts

There was some variation among the ten community school districts in the type of students they enrolled in their Dropout Prevention Programs. For example, the average proportion of days present in 1985-86 was 77.9% for all Year Two targeted students. District 15, however, enrolled students with lower prior attendance than the rest (75%), while Districts 10 and 14 had the highest prior attendance rates (81.2% and 81.5%, respectively).

FIGURE 2-4

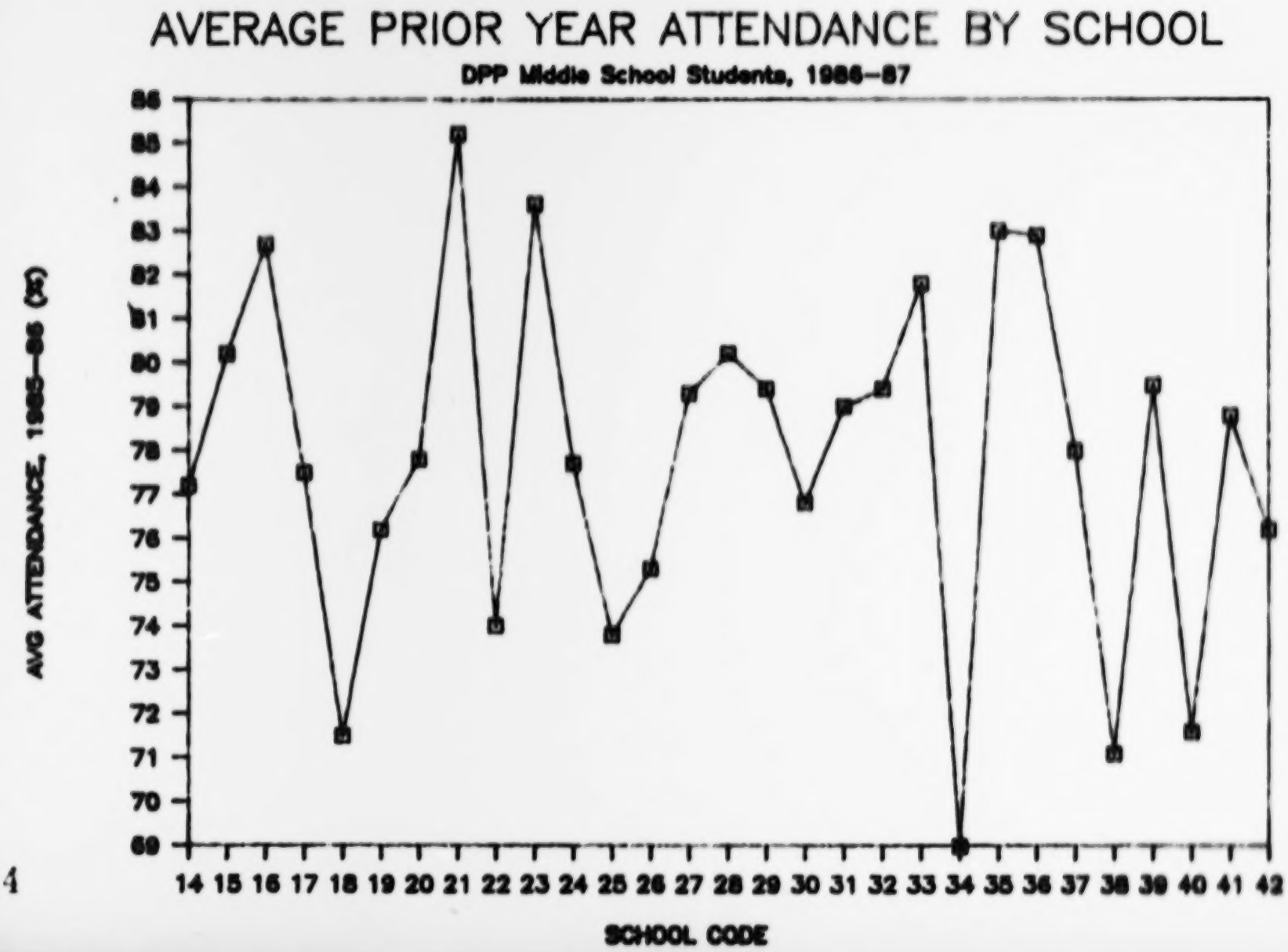

AVERAGE PRIOR YEAR ATTENDANCE BY SCHOOL
DPP Middle School Students, 1986-87
AVG ATTENDANCE, 1985-86 (%)
86
85
84
83
82
81
80
79
78
77
76
75
74
73
72
71
70
69
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42
SCHOOL CODE

TABLE 2-3

Number of Targeted Students in Categories of Prior Attendance DPP Middle Schools, 1986-87

School Code	N	Days Absent in 1985-86			
		0-15	16-30	31-60	61+
14	115*	12	51	34	18
15	101	21	36	34	10
16	75	21	27	22	5
17	76	1	27	45	3
18	140	9	16	90	25
19	63	3	28	22	10
20	126	0	57	63	6
21	127	46	48	29	4
22	89	1	25	50	13
23	43	8	23	11	1
24	107	27	23	46	11
25	126	10	33	65	18
26	224	12	79	104	29
27	88	1	44	39	4
28	147	19	61	61	6
29	137	36	32	53	16
30	103	4	36	55	8
31	115	11	43	51	10
32	81	25	20	25	11
33	133	19	63	48	3
34	60	4	13	27	16
35	121	24	60	32	5
36	136	37	48	45	6
37	66	9	24	26	7
38	114	0	21	68	25
39	137	21	54	53	9
40	82	3	17	50	12
41	105	22	35	33	15
42	71	3	24	35	9

* Due to missing data, the sample sizes given in this table differ from the total number of students participating in DPP. (Total students in program = 3922.)

FIGURE 2-5

AVG PRIOR YR COURSES PASSED, BY SCHOOL

DPP Middle School Students, 1986-87

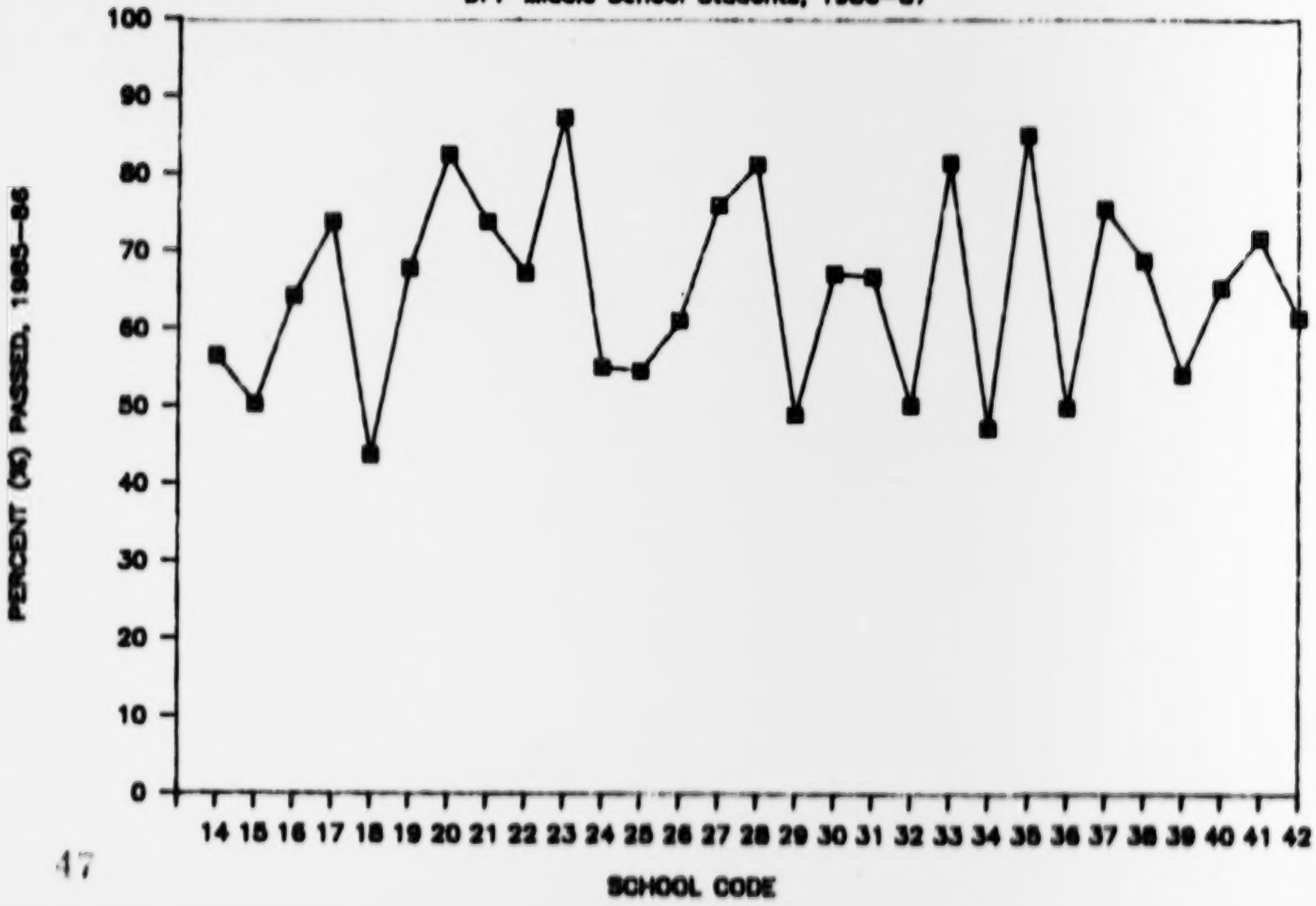


TABLE 2-4

Characteristics of Targeted Students DPP Middle Schools, 1986-87

School Code	N	Avg. Prior Attendance	Avg. Prior Courses Passed	Avg. Prior DRP (Reading)	Avg. Prior MAT (Math)
OVERALL	3922*	78.0 %	64.7 %	42.6 %	28.1 %
14	130	77.2 %	56.5 %	45.5 %	33.4 %
15	131	80.2	50.2	30.9	21.6
16	101	82.7	64.2	36.5	23.4
17	164	77.5	73.8	42.9	31.1
18	174	71.5	43.7	36.4	22.5
19	99	76.2	67.8	48.7	39.6
20	147	77.8	82.5	49.5	28.9
21	143	85.2	73.8	42.5	32.9
22	110	74.0	67.2	45.6	30.6
23	49	83.6	87.3	47.0	29.8
24	137	77.7	55.1	41.2	23.3
25	161	73.8	54.6	47.7	35.6
26	234	75.3	61.1	42.3	29.4
27	102	79.3	76.0	46.6	31.5
28	172	80.2	81.3	35.4	25.7
29	160	79.4	49.0	34.2	23.2
30	114	76.8	67.2	50.4	34.4
31	133	79.0	66.8	44.3	26.4
32	106	79.4	50.2	40.4	18.7
33	156	81.8	81.6	54.4	29.2
34	95	69.0	47.3	33.0	22.4
35	146	83.0	85.1	50.3	32.1
36	156	82.9	49.9	39.2	24.0
37	115	78.0	75.6	48.0	32.5
38	152	71.1	68.9	39.3	27.2
39	175	79.5	54.2	34.9	26.6
40	106	71.6	65.4	48.3	31.4
41	150	78.8	71.8	45.4	24.6
42	104	76.2	61.5	40.2	23.3

* Due to missing data, the sample sizes used in the computation of each variable differ. The numbers given here are the total number of students participating in DPP at the middle school level.

The average proportion of subjects passed in 1985-86 was 65.7%. Districts 7 and 17 had the lowest proportion of prior subjects passed (51.7% and 52%, respectively), while District 10 had the highest proportion of prior subjects passed (79.95%). These district-level differences in student background characteristics are summarized in Table 2-5.

Differences in Student Characteristics Between Program Models

Table 2-6 shows student background characteristics in the CBO and PC models. Some differences did exist between the two models. For example, more targeted students were at least 2 years overage in the PC model (28.5%) than in the CBO model (20.3%). More students were admitted in the spring semester in the CBO model (7.4%) than in the PC model (2.9%). The distribution of DPP students among grade level differed in the two models. Similar proportions of students were enrolled in the 7th grade (30.8% in the CBO model, 33.8% in the PC model); however, in the CBO model, 44.3% of the students were in the 8th grade and 24.9% in the 9th grade, while in the PC model 51.5% of the students were in the 8th grade and 14.7% were in the 9th grade.

However, along the dimensions of the two main student background characteristics (prior attendance and courses passed), smaller differences between models were found. The average number of days present in 1985-86 for the CBO students was 77%, while it was 78.8% for the PC students. The average proportion of subjects passed in 1985-86 was 65.9% for the CBO model versus 64.8% for the PC model.

Comparison with Year One Students

It appears that the middle school students served by the Dropout Prevention Program in Year One and Year Two were fairly comparable. The program served 3922 students in 1986-87, 414 (or 9.5%) fewer than the number served in the program's first year (4336). In both years, over 93% of the students entered the program in the fall term, nearly half of the students were eighth graders, and the modal age of program students was 14. In Year One, the average prior year (1984-85) attendance rate by school varied from 75% to 86%. This compares with a range from 69% to 85.2% in Year Two. In Year One, the prior year proportion of courses passed varied from about 45% to over 80%, compared with a range of 43.7% to 87.3% in Year Two. Overall, the average prior year attendance rate was 76.5% for Year One students, and 78.0% for Year Two students. The average proportion of prior courses passed was 65.1% for Year One students and 64.7% for Year Two students.

Figure 2-6 shows how each school's target population differed between Year One and Year Two, in terms of average prior attendance rates. Ten schools served students in Year Two whose prior year attendance was somewhat better than that for their

TABLE 2-5

Characteristics of Targeted Students, by District DPP Middle Schools, 1986-87

District	N	Average Prior Attendance	Average Prior Courses Passed	Average Prior DRP Score (Reading)	Average Prior MAT Score (Math)	% Over-age	% LEP
OVERALL	3922*	78.0%	64.7%	42.6	28.1	26.1%	61.6%
3	311	79.5%	58.5%	39.1	21.7	20.9%	66.7%
7	356	76.5	51.7	37.1	26.4	35.6	50.0
9	448	76.6	61.0	45.0	28.4	29.9	56.1
10	466	81.2	80.0	49.2	30.7	15.6	75.0
14	490	81.5	69.7	37.3	28.2	36.3	75.5
15	318	75.0	69.5	46.8	31.1	23.1	45.5
17	463	77.7	52.0	39.6	24.1	27.1	60.0
19	328	77.0	70.0	49.0	35.3	20.2	50.0
27	283	76.7	65.4	43.1	29.5	16.7	53.9
32	459	76.4	66.1	41.0	26.4	29.1	54.2

* Due to missing data, the sample sizes used in the computation of each variable differ. The numbers given here are the total number of students participating in DPP at the middle school level.

TABLE 2-6

Characteristics of Targeted Students, by Program Model DPP Middle Schools, 1986-87

Program Model	N	Average Prior Attendance	Average Prior Courses Passed	Average Prior DRP Score (Reading)	Average Prior MAT Score (Math)	% Over-age	% LEP
OVERALL	3922*	78.0%	64.7%	42.6	28.1	26.1%	61.6%
CBO	1240	77.0%	65.9%	44.6	29.7	20.3%	54.2
PC	2234	78.8	64.8	41.1	27.2	28.5	66.2

* Due to missing data, the sample sizes used in the computation of each variable differ. The numbers given here are the total number of students participating in DPP at the middle school level.

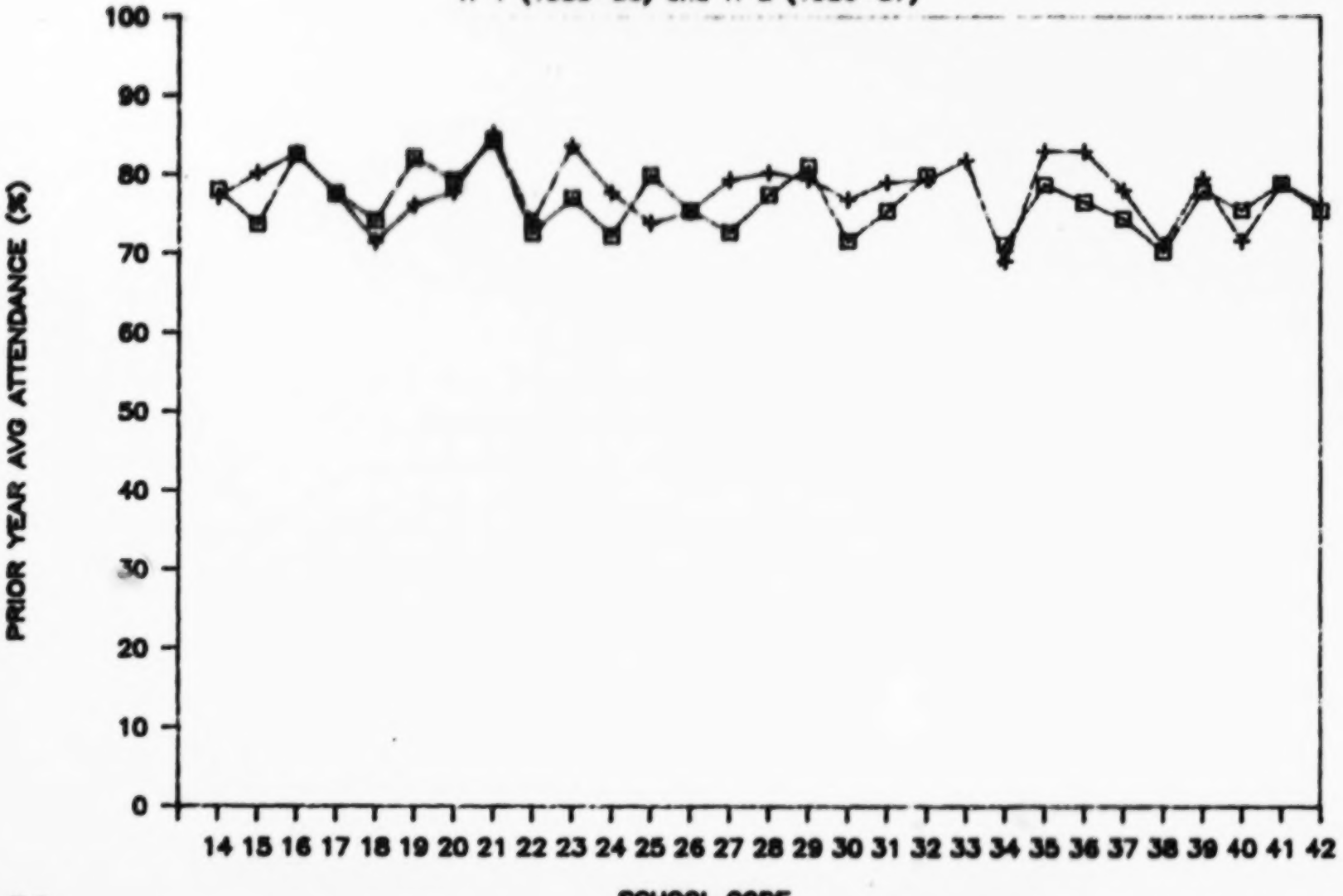
District 9 was excluded from this model-level analysis.

Total students in program = 3922.
Total students in CBO model = 1240.
Total students in PC model = 2234.

FIGURE 2-6

PRIOR ATTENDANCE OF MS STUDENTS

Yr 1 (1985-86) and Yr 2 (1986-87)



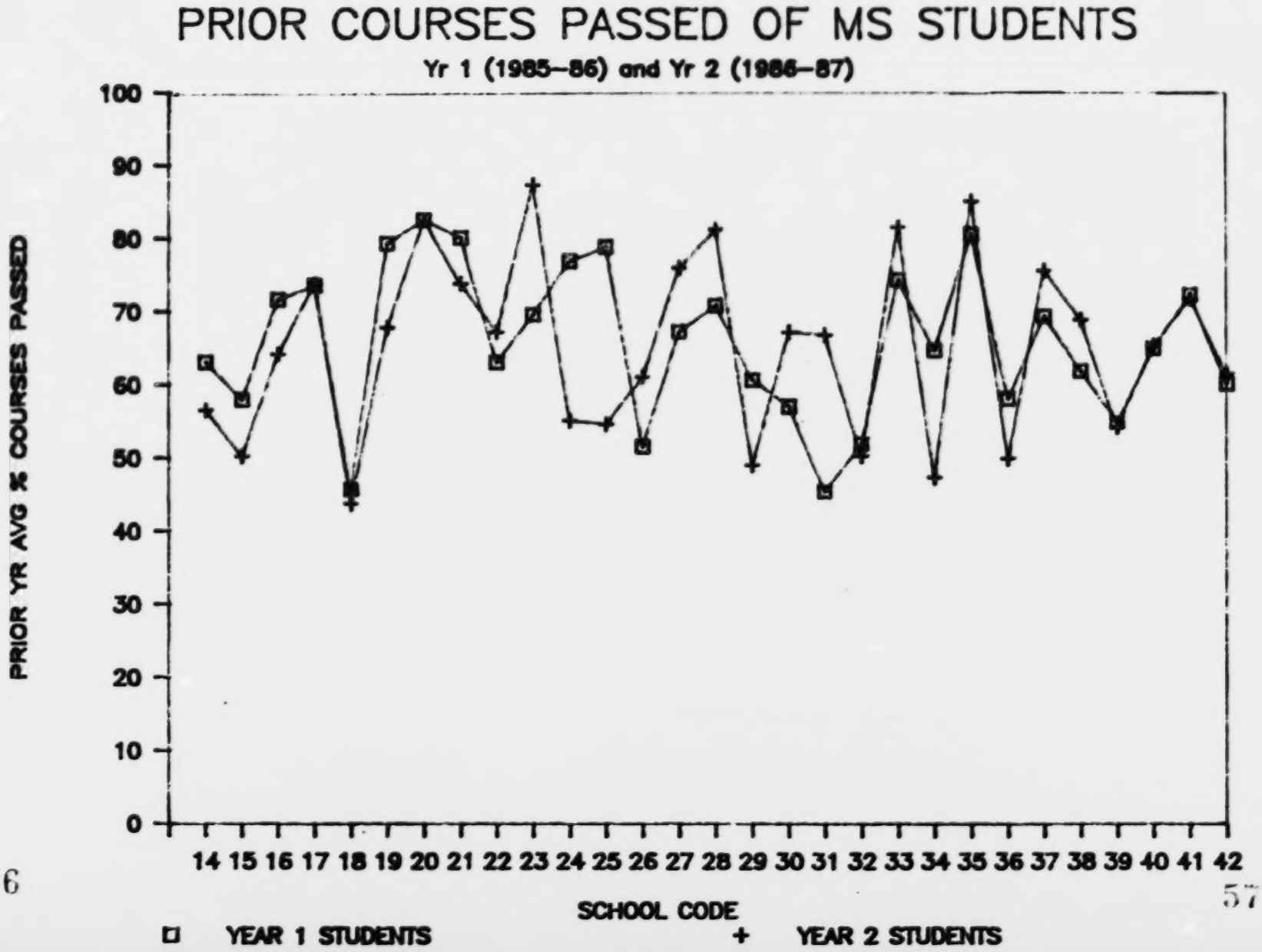
counterparts in Year One, while four schools served students whose prior year attendance was somewhat lower than the rate for students in Year One. Overall, the differences were not large; the average prior year attendance rate for Year One and Year Two students in a school never differed by more than 7%.

Figure 2-7 shows the differences in average proportion of prior subjects passed for students in Year One and Year Two, by school. Here, the differences within schools between the two cohorts of students were greater, varying by as much as 24% in one school, and by at least 10% in 9 schools. In Year Two, eleven schools served students who had better prior year course performance than the targeted students in the same school the previous year, while nine schools served students whose prior course performance was worse than that for the Year One students in the same school.

Conclusion

This chapter has profiled some of the background characteristics of the middle school students participating in the Dropout Prevention Program during Year Two, 1986-87. Although the entire population was clearly at risk for poor attendance and/or academic failure, it was not a homogeneous group with a single set of problems. Instead, individual students were different from one another in the configurations of characteristics that put them at risk, and student groups similarly varied among schools, districts, and program models. In later chapters, many of these characteristics will be related to measures of students' receipt of services, program outcomes, and, in future analyses, to the student characteristics measured by the Teachers College student survey.

FIGURE 2-7


PRIOR COURSES PASSED OF MS STUDENTS
Yr 1 (1985–86) and Yr 2 (1986–87)
PRIOR YR AVG % COURSES PASSED
100
90
80
70
60
50
40
30
20
10
0
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42
SCHOOL CODE
YEAR 1 STUDENTS
YEAR 2 STUDENTS

Chapter Three

ANALYSIS OF MIDDLE SCHOOL MONTHLY SUMMARY OF SERVICE REPORTS FROM NOVEMBER, FEBRUARY AND MAY 1986-87

A central goal of the evaluation is to establish the relationship between students' receipt of services from the Dropout Prevention Program and the students' attendance, grades, attitudes toward school and self, and, ultimately, the likelihood of their persisting in school or dropping out. Toward this end, Teachers College has computerized a sample of the Year Two middle school Monthly Summary of Service Reports (MSSRs), the reports for November, 1986 and February and May, 1987. The Office of Student Progress (OSP) is currently keypunching all of the MSSRs completed by school and CBO staff in Year Three, and Teachers College will analyze this complete set for the Year Three Final Report.

OSP created the MSSR, and has subsequently revised it to its present form, for the twin purposes of holding staff accountable for services and reviewing the distribution and effects of services to students in need. In analyzing a sample of these reports ourselves, Teachers College is acknowledging their potential value for program development and research. At the same time, we have questions about the reliability of some of the data from the MSSR, which the Year Two Interim Report discussed in detail, and which this report will summarize. We have also questioned the cost of the MSSRs to the program, in terms of the definition of priorities and the concentration of effort that goes into producing the MSSRs. For these very reasons, however, it remains important to examine the relationship of the MSSR data to student and school characteristics and to outcomes. The specific aim of this chapter is to explicate the distribution of services as reported on the MSSRs, which will then be correlated with OEA data and Teachers College Survey data in subsequent chapters.

During the combined months of November, February, and May, 1986-87, a total of 12,053 MSSRs were submitted either to OSP (by Board of Education staff in the DPP schools) or directly to Teachers College (by CBO staff in the CBO model schools).

The analysis in this chapter focuses on the distribution of services over various categories of records, rather than on services per individual student. While the total number of services in different categories for individual students is correlated with student characteristics and outcomes in later chapters, this chapter only analyzes the frequencies of services on separate records.

Content of the MSSR

The MSSR is what its name implies, a monthly summary of service report. DPP staff at the program sites transfer to this form information from other records they maintain for more specific purposes: school attendance rosters, telephone and mail logs, home visit reports, guidance logs, health folders, trip rosters, etc. The MSSR has been designed so that on looking at the record for an individual student, one can see at a glance an attendance pattern for the month, and how this relates to the distribution of services to the student in several areas: attendance outreach (including mail, personal phone calls, autodial calls, home visits, conferences with a student's parent, conferences with the student); guidance (individual guidance sessions, group guidance sessions, parent guidance sessions); contacts with health staff; participation in extended day activity; and participation in linkage activity. The MSSR also contains a section noting the occurrence of special events, including a student's entering or leaving the program, health record review, physical examination, vision screening, hearing screening, and suspension.

The MSSR does not include a summary of a student's participation in career education or other DPP alternative education activities or trips during school hours.

Who Served Which Students, and Who Completed MSSR Forms

The facilitators in all 29 DPP middle schools were required to turn in to the Office of Student Progress each month an MSSR for each student for whom Board of Education DPP staff were responsible. In the Project Connect (PC) schools, where DPP staff were entirely Board of Education personnel, this was fairly straightforward. Each PC school was expected to enroll 150 students in the program, and thus 150 forms, more or less according to the actual enrollment, were to be submitted to OSP for each month between September and June.

In the schools where community-based organizations (CBOs) are working in the Dropout Prevention Program, the expectation for Board of Education staff was much more ambiguous. For 1986-87, it was agreed that the CBO in each school would serve 100 students, and it was subsequently decided that the BOE staff in the school should be responsible for 50 students. OSP has stated to the evaluators that the 50 students were supposed to be in addition to the 100, but, as indicated in Chapter 1, OSP left open the question of whether and how the BOE and CBO staffs should integrate their services to the students. OSP, in any event, expected the BOE personnel to turn in to OSP MSSRs for each student they served. The CBOs were not required to turn in MSSRs to OSP for the students they served, and instead, Teachers College was asked to collect service data from the CBOs directly. TC negotiated this with the CBOs this past fall, when it was agreed that CBOs would use the OSP MSSR forms, but for just three

months, November, February, and May.

Table 3-1 summarizes the number of service logs turned in by the relevant parties in each of the 10 districts, indicates whether the students served by CBO and BOE personnel were the same or different in a given site, and shows if the logs were submitted to OSP or TC directly. In the PC districts, the average number of students served per school in each month ranged between 132 and 145. In these districts, the greatest enrollment of students tended to occur in November or February. In the CBO districts, the average number of students served in a school in a given month ranged between 78 and 126 in three districts, and between 145 and 174 in one (District 27), with the largest enrollments occurring consistently in May.

The resolution of the issue of who the CBO and BOE personnel would serve, and how they would report these services, turned out to be different in each CBO district. It can be seen that in District 3, Rheedlen (or its subcontractor, the DOME) and the BOE staff served the same students in each school, averaging about 87 students per school. Rheedlen and the BOE staff reported their services separately, Rheedlen to TC and the BOE staff to OSP. In District 27, the CBO, FEGS, served an average of 99 students in each school, and the BOE staff served different students, an average of 59 in each school. Again, the CBO and the BOE staff turned in their reports to TC and OSP separately.

In District 19, Colony South and BOE staff both served the same students and reported their services jointly, submitting just one MSSR to represent their combined services to each student. The MSSRs were turned in to OSP, who in turn furnished them to TC. About 113 students were served on the average in each school in District 19. In District 15, Good Shepherd and the BOE staff served on average per school about 103 students together. In November and May they reported their services jointly, but in February they switched to reporting their services separately. Finally, the BOE personnel in District 9 and Touro College set out to serve the same students, on average about 115 in each of the schools, but the Touro operation did not get off the ground and the BOE staff pulled back to about 99 students on average in the February reports and then increased to 150 students per school in the May reports.

OSP Review of Student Documentation for the MSSRs

Assistants from OSP visited the program sites periodically during the 1986-87 school year, and between November and January completed a first 1986-87 AIDP/DPP Site Visit Report. This report inventoried the staff and activities in place for each component of the program. The assistants, or "monitors" as they were known in the schools, examined the documentation of services reported for a 10% sample of students included on the October, 1986 MSSRs, for most of the schools. Teachers College has analyzed the results of this review of documentation. Not surprisingly, the

TABLE 3-1

Middle School Service Reports Submitted to the Office of Student Progress or Teachers College in November, February, and May 1986-87

Dist	Provider	# of MSSRs in Nov	# of MSSRs in Feb	# of MSSRs in May	BOE & CBO Students the Same?	Records to OSP or TC
3	BOE	210	268	298	yes	OSP
	CBO	236	261	291		TC
7	BOE	397	422	402		OSP
9	BOE	342	296	450	---	OSP
	CBO	0	0			---
10	BOE	443	433	416		OSP
14	BOE	428	421	388		OSP
15	BOE	295	298	339	yes	OSP
	CBO	*	297	*		TC/OSP
17	BOE	440	429	428		CSP
19	BOE	321	314	277	yes	OSP
	CBO	*	*	*		
27	BOE	127	112	115	nc	OSP
	CBO	162	171	232		TC
32	BOE	441	440	421		OSP

** submitted jointly with BOE*

The reports of BOE and CBO staff may not be comparable; see text.

patterns were quite different for Project Connect sites and CBO sites. Among PC schools, documentation less than fully matched the services claimed in four schools spread among three districts; two of the schools were in District 7, where staff shortages clearly hampered program functioning. Documentation did match services in eight schools; and in three schools it actually exceeded services claimed, i.e., not as many services were recorded on the MSSR as were evidenced in other records. In the last instances particularly, what was in question was not whether the services were being performed as much as their not being reflected on the MSSR.

In the CBO schools, OSP was able to audit services recorded by BOE staff in all of the districts except District 3, but only the MSSRs that were filled out jointly by CBO and BOE staff in Districts 15 and 19 could be audited to substantiate the services reported by CBO staff. (In 1987-88, OSP is receiving directly and auditing the MSSRs completed by both BOE and CBO staff.)

The OSP Site Visit Reports from 1986-87 recorded a variety of recommendations that appeared to represent technical assistance given by the OSP Assistants to the BOE staff they were monitoring. Many of the recommendations pertained to bureaucratic issues, for example, the correct completion of forms, documentation of services, and the like. Some recommendations may have been more oriented to staff development, for example, those concerning the role of the facilitator and strategies for productive use of the Pupil Personnel Committee. Teachers College field researchers found that in the majority of the schools the OSP Assistants' activities were perceived more as enforcing conformity to standards than as enabling the solution of problems. In a meeting between OSP Assistants and Teachers College research staff, in November, 1987, some of the OSP Assistants felt that their role as monitors was reflected more in the Site Visit Reports, while the technical assistance role was carried out more in other visits to the schools and districts. OSP staff portrayed their activities as being governed by the goals of the DPP, but Teachers College staff perceived this as not being oriented to goal setting in the schools. OSP staff saw themselves as solving a variety of problems. However, these problems seemed to pertain more to the management of the program than to dropout prevention issues presented in the schools.

Services Reported by School in November, February, and May Separately

Table 3-2 displays the total number of services that were reported in each of 10 categories in November, February and May. The 29 schools have been assigned code numbers used elsewhere in this and other reports. Mail and personal telephone calls have been condensed into one service category, as have school-parent conferences and parent guidance sessions. All of the other service categories from the MSSR are included in the array as reported.

TABLE 3-2

Frequency of Services Reported for DPP Middle Schools on Monthly Summary of Service Reports in November, February, and May 1986-1987

	Attendance												Guidance			Other					
	mail & phone			*auto dialer*			*home visit*			*parent conf/guid*			*schl-stdnt confer*			*indiv. guidance*			*group guidance*		
School	Nov	Feb	May	Nov	Feb	May	Nov	Feb	May	Nov	Feb	May	Nov	Feb	May	Nov	Feb	May	Nov	Feb	May
14	97	224	164	0	1	77	66	27	47	3	7	15	13	21	2	5	59	37	0	21	111
15	77	158	361	0	0	6	22	37	34	14	1	15	13	0	0	0	0	48	0	0	52
16*	140	328	475	0	0	10	47	140	102	53	53	93	25	139	142	375	878	487	1	61	103
17	201	305	282	3	0	0	5	12	11	7	12	6	28	68	29	0	79	79	21	30	13
18	424	626	473	0	0	0	15	23	56	17	6	5	2	36	68	67	41	60	34	45	30
19*	161	137	347	0	0	0	18	86	123	16	12	6	22	8	75	58	75	62	10	33	0
20	86	78	64	0	0	0	1	61	158	28	26	13	3	15	0	52	43	57	32	122	113
21	168	354	477	391	254	322	1	45	79	6	13	14	97	217	273	0	2	0	0		
22*	159	617	471	0	0	0	7	60	23	38	54	32	6	136	52	50	372	141	0	76	20
23*	116	397	347	596	342	90	7	9	17	15	19	2	9	62	0	202	258	72	233	342	39
24^	54	83	67	0	0	0	3	19	42	0	40	5	0	2	0	20	82	28	0	59	105
25^	77	110	735	2	0	0	1	24	110	1	8	20	0	85	106	14	21	139	0	50	91
26*	217	347	578	0	0	1	3	8	20	15	17	38	31	343	393	130	336	619	245	234	46
27*	141	160	98	0	0	0	10	21	15	21	10	12	15	92	109	173	351	145	0	88	52
28	62	167	236	97	0	0	15	4	48	7	4	6	69	54	67	3	2	0	0	0	0
29	96	78	140	0	0	0	51	89	60	64	34	70	0	236	84	268	194	285	133	102	131
30*	366	243	363	19	22	30	12	12	26	8	8	4	1	1	0	131	190	188	56	137	143
31	46	356	596	0	0	0	23	36	67	6	11	5	5	58	558	0	263	150	121	239	187
32*	31	114	161	0	2	2	24	127	130	27	102	117	13	58	80	162	697	699	0	22	67
33	104	486	849	0	0	0	12	50	95	15	16	3	13	514	450	159	108	242	2	43	5
34	0	160	332	0	0	0	0	0	24	0	0	3	0	0	31	0	0	151	0	0	135
35	141	333	373	0	0	0	10	38	46	35	11	6	88	84	11	126	67	66	4	3	101
36	574	586	711	53	145	45	30	32	43	10	28	21	2	17	63	15	45	19	29	17	52
37*	96	75	227	0	0	70	36	28	103	34	17	43	4	12	7	75	81	203	119	28	45
38	16	24	83	0	0	4	13	82	123	20	39	49	23	0	8	30	57	98	11	15	8
39	149	120	135	0	0	0	53	41	52	23	27	16	41	18	50	1	0	0	0	0	0
40*	187	257	266	1	0	0	19	22	23	35	25	27	37	204	235	190	201	227	32	41	139
41^	90	476	95	0	0	0	27	99	141	17	21	104	0	1	0	149	650	807	0	347	472
42*	203	218	331	1	30	1	41	149	141	6	28	91	60	84	111	227	457	573	0	64	100
Total	21,629			2617			3874			2025			6187			13,957			5843		

* CBO schools (excluding District 9 schools)
^ District 9 schools

The reports of BOE and CBO staff may not be comparable; see text.

TABLE 3-2, continued

Frequency of Services Reported for DPP Middle Schools on Monthly Summary of Service Reports in November, February, and May 1986-1

School	health contact			extended day			linkage activity		
	Nov	Feb	May	Nov	Feb	May	Nov	Feb	May
14	21	58	0	294	385	462	0	0	0
15	0	0	0	0	0	0	0	0	0
16	12	1	4	201	479	532	7	32	143
17	0	0	0	224	158	59	0	110	6
18	71	0	0	0	0	0	0	0	13
19	0	8	0	0	43	0	0	0	0
20	9	68	1	0	98	285	0	0	0
21	0	0	0	0	0	373	0	0	0
22	1	0	0	12	8	0	5	0	4
23	0	0	0	14	82	62	0	0	25
24	1	15	33	0	62	30	0	0	141
25	0	10	74	0	112	5	0	49	90
26	46	8	5	26	19	127	9	4	30
27	2	14	0	121	208	119	14	0	7
28	1	35	40	0	0	142	35	0	36
29	0	3	14	0	0	0	1	0	0
30	0	6	7	0	34	0	20	0	26
31	0	1	0	0	0	4	0	33	16
32	3	14	3	36	89	130	16	7	41
33	1	0	0	180	200	122	0	21	10
34	0	0	102	157	0	0	0	0	34
35	0	0	0	25	225	71	31	18	56
36	0	0	0	0	0	0	0	0	12
37	14	5	0	0	0	0	0	0	0
38	0	0	0	49	58	7	0	0	0
39	0	0	0	0	0	307	0	0	0
40	0	4	3	63	96	134	13	7	29
41	2	13	56	0	109	234	0	10	0
42	2	7	11	37	48	458	0	0	137
		809			7639			1286	

Overall, the most services reported in the two months combined were mail and phone (21,832), followed by individual guidance (14,160). In a high middle range were extended day (7,639), school-student conferences (6,200), and group guidance (5834), while home visits (3,931), autodialer (2,681), and parent conferences or guidance (2,068) were in the low middle range. Relatively few services were reported as participation in linkage activity (1,286) and contact with health personnel (809).

There was a sharp increase in the number of services to students reported in May, compared to November and February. In every service area except auto dialer, the number of services reported in May almost equalled the combined number that had been reported for November and February.

The range of service frequencies among the schools in almost every category is striking. The TC evaluation team's familiarity with the circumstances in virtually all of the program sites does help us understand these variations. Auto dialers were not installed in some of the schools, and were inoperative in some schools where they were installed. The whole variety of general factors considered in the implementation analysis discussed in the Year Two Interim Report relate to the different frequencies of services in the different schools. Differences in staff availability account for some variations in the services recorded. Just the importance attached to documenting services seems to have differentiated one school from another, stemming from different priorities given to student contact and record keeping. The TC observers noted great differences among the program sites in their recording of school-student contacts.

School-Student Conferences and Guidance Sessions

In the Interim Report, we reviewed OSP's distinction between guidance services and school-student conferences. Essentially, a guidance service was only supposed to be recorded if it was carried out by a person licensed or certified for counseling and if it had a minimum duration of perhaps 15 minutes. Teachers College observed that students appeared to be getting guidance in some schools where it could not be counted and, conversely, that guidance was probably being overestimated in some other schools, especially those with CBO staffs. The Interim Report recognized the long-range prospect of OSP's audit resulting in reliable data on guidance services, but questioned the reliability and validity of these data for 1986-87. We have now begun a comparison of MSSR frequencies with students' responses to the Spring 1987 Student Survey, and the results so far tend to support elements of both OSP's and Teachers College's positions.

We have calculated the average number of individual guidance sessions recorded for a targeted student in each school during the three months sampled, and likewise the average number of staff-student conferences recorded for a targeted student in each

school. These averages have then been correlated with the school-level average response of students to a Student Survey item that asked how often during the year the student "talked one-on-one with a teacher, counselor or other adult in the school about problems at school or at home." (For a full discussion of the Student Survey, see Chapter 5.) For the 26 schools in which we had an adequate survey sample, the correlation between average individual guidance services and one-on-one talk about problems was .57 ($p<.001$), while the correlation between average staff-student conferences and one-on-one talk about problems was only .34 ($p<.05$). This is consistent with OSP's position on distinguishing between guidance and conferences. However, the distinction only holds up in the PC schools when the correlations are examined for the PC and CBO schools separately. We have not yet correlated MSSR data and Student Survey responses for individual targeted students. This analysis should not be taken to suggest that guidance is defined just in terms of students' problems. Also, it should be noted that the association between staff-student conferences and students' reports of one-on-one talk about problems was significant.

Services Reported by BOE and CBO Staffs Separately or Jointly, By District

Table 3-3 tallies the service frequencies by district, and identifies the CBOs which have had contracts with five of these districts. The services have been summed separately from (1) the records submitted to OSP by Board of Education staff, (2) the records submitted to Teachers College by CBO staff, and (3) the records submitted to OSP by BOE and CBO staffs jointly. Again, there are tremendous variations in the frequencies reported, in every category except linkage activities. Regarding first the totals in each category, one or two districts stand out from the others as having reported exceptionally high levels of services. On breaking those down further, however, we find that in only some cases have all the schools in the district contributed substantially to these high tallies. District 17 reported far the highest number of mail and telephone communications, and in fact all three schools in the district ranked at least in the upper half of the schools for these communications. District 3 reported visiting homes the most extensively, and all three schools in the district reported high numbers of home visits. District 3 and District 32 both reported relatively high levels of school-parent conferences, and in each case all three of the district schools were in the upper half of the distribution for schools. Both District 3 and District 15 reported high levels of individual guidance. The two schools in District 27 reported frequent use of group guidance, and all three schools in District 10 reported relatively high use of the extended day.

These relatively high tallies for all the schools of a district represent district or CBO priorities and shared practices. In Districts 10, 17, and 32, all services are provided by Board of Education Staff, so the salience might

TABLE 3-3

District Level Analysis of Middle School Service Reports by Board of Education and Community-Based Organization Staff in November, February, and May 1986-87 Combined

Legend:
1 = BOE Personnel
2 = CBO Personnel
3 = BOE and CBO Personnel jointly
T = Total
-- = Not Applicable

	ATTENDANCE																			
	mail & phone				auto dialer				home visit				prnt conf/guid				schl-stdnt conf			
	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	T
Dat																				
3[a]	322	1679	--	2001	1	45	--	46	19	882	--	46	16	554	--	570	1	711	--	712
7	1570	--	--	1570	84	--	--	84	256	--	--	256	58	--	--	58	80	--	--	80
9[b]	1787	--	--	1787	2	--	--	2	466	--	--	466	216	--	--	216	194	--	--	194
10	3074	--	--	3074	3	--	--	3	279	--	--	279	111	--	--	111	1285	--	--	1285
14	1868	--	--	1868	1064	--	--	1064	335	--	--	335	116	--	--	116	886	--	--	886
15[c]	418	616	1322	2356	0	0	1	1	41	62	97	200	34	55	165	254	105	321	454	880
17	4292	--	--	4292	243	--	--	243	325	--	--	325	109	--	--	109	809	--	--	809
19[d]	--	--	2014	2014	--	--	141	141	--	--	442	442	--	--	142	142	--	--	134	134
27[e]	352	1650	--	2002	515	514	--	1029	31	31	--	62	62	44	--	106	127	711	--	838
32	665	--	--	665	4	--	--	4	608	--	--	608	343	--	--	343	369	--	--	369

[a] CBO is Rheedlen Foundation, subcontracted to DOME in two middle schools.

[b] CBO was Touro College until February when contract was terminated. Touro did not submit MSSRs for November to Teachers College and delivered few services to students during this month.

[c] CBO is Good Shepherd Services. CBO and BOE staff reported services jointly in November and separately in February.

[d] CBO is Colony South Brooklyn Houses. CBO and BOE staff reported services jointly in both November and February.

[e] CBO is Federation Employment Guidance Services.

The reports of BOE and CBO staff may not be comparable; see text.

TABLE 3-3, continued

District Level Analysis of Middle School Service Reports by Board of Education and Community-Based Organization Staff in November, February, and May 1986-87 Combined

Legend:
1 = BOE Personnel
2 = CBO Personnel
3 = BOE and CBO Personnel jointly
T = Total
-- = Not Applicable

	GUIDANCE								OTHER											
	indiv guid				*group guid*				*health*				*extended day*				*linkage*			
	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	T	1	2	3	T
Dat																				
3*	240	4315	--	4555	164	254	--	418	17	40	--	57	1	2009	--	2010	89	294	--	383
7	300	--	--	300	319	--	--	319	181	--	--	181	1298	--	--	1298	34	--	--	34
9[b]	1910	--	--	1910	1124	--	--	1124	204	--	--	204	552	--	--	552	290	--	--	290
10	926	--	--	926	222	--	--	222	1	--	--	1	1264	--	--	1264	260	--	--	260
14	8	--	--	8	0	--	--	0	76	--	--	76	826	--	--	826	71	--	--	71
15[c]	364	560	926	1850	82	123	243	448	8	10	6	24	132	180	449	761	0	7	72	79
17	650	--	--	650	754	--	--	754	72	--	--	72	4	--	--	4	74	--	--	74
19[d]	--	--	1057	1057	--	--	570	570	--	--	40	40	--	--	97	97	--	--	26	26
27[e]	590	1027	--	1617	466	855	--	1321	8	51	--	59	1	329	--	330	10	58	--	68
32	1084	--	--	1084	667	--	--	667	95	--	--	95	497	--	--	497	1	--	--	1

* CBO is Rheedlen Foundation, subcontracted to DOME in two middle schools.

[b] CBO was Touro College until February when contract was terminated. Touro did not submit MSSRs for November to Teachers College and delivered few services to students during this month.

[c] CBO is Good Shepherd Services. CBO and BOE staff reported services jointly in November and separately in February.

[d] CBO is Colony South Brooklyn Houses. CBO and BOE staff reported services jointly in both November and February.

[e] CBO is Federation Employment Guidance Services.

The reports of BOE and CBO staff may not be comparable; see text.

reflect policies of the districts as such. From our observations, however, we would attribute the high frequency of extended day activities in District 10 as much to the initiative and collaboration of the facilitators in the schools as to the support they have additionally received from the district. In District 3, most of the services in the categories for which there were exceptionally high tallies were reported by the CBO. In District 15 and in District 27, both Board of Education and CBO staff contributed to the high frequencies of services reported in the indicated categories. As noted before, the BOE and CBO staffs worked closely together in District 15, serving the same students and in November reporting their services together. The staffs worked relatively separately in the District 27 schools, but a more subtle cooperation or mutual influence may have been involved.

We do not intend by this analysis to stimulate a contest to attain the highest numbers of services in one or another category. It may be that some balance or equal distribution of effort among various types of service is more effective than investing the most in a few. Further, there has got to be some trade-off involved in these investments. Indeed, one reason for our skepticism about certain of the numbers is that it seems unlikely that staff could be simultaneously involved in activities that resulted in very high frequencies of, say, both home visiting and individual student conferences or guidance, as in the reports from one district. The analyses here, then, are meant to point to issues that can be explored more extensively in the data already obtained and in further cooperation with DPP school and CBO staffs.

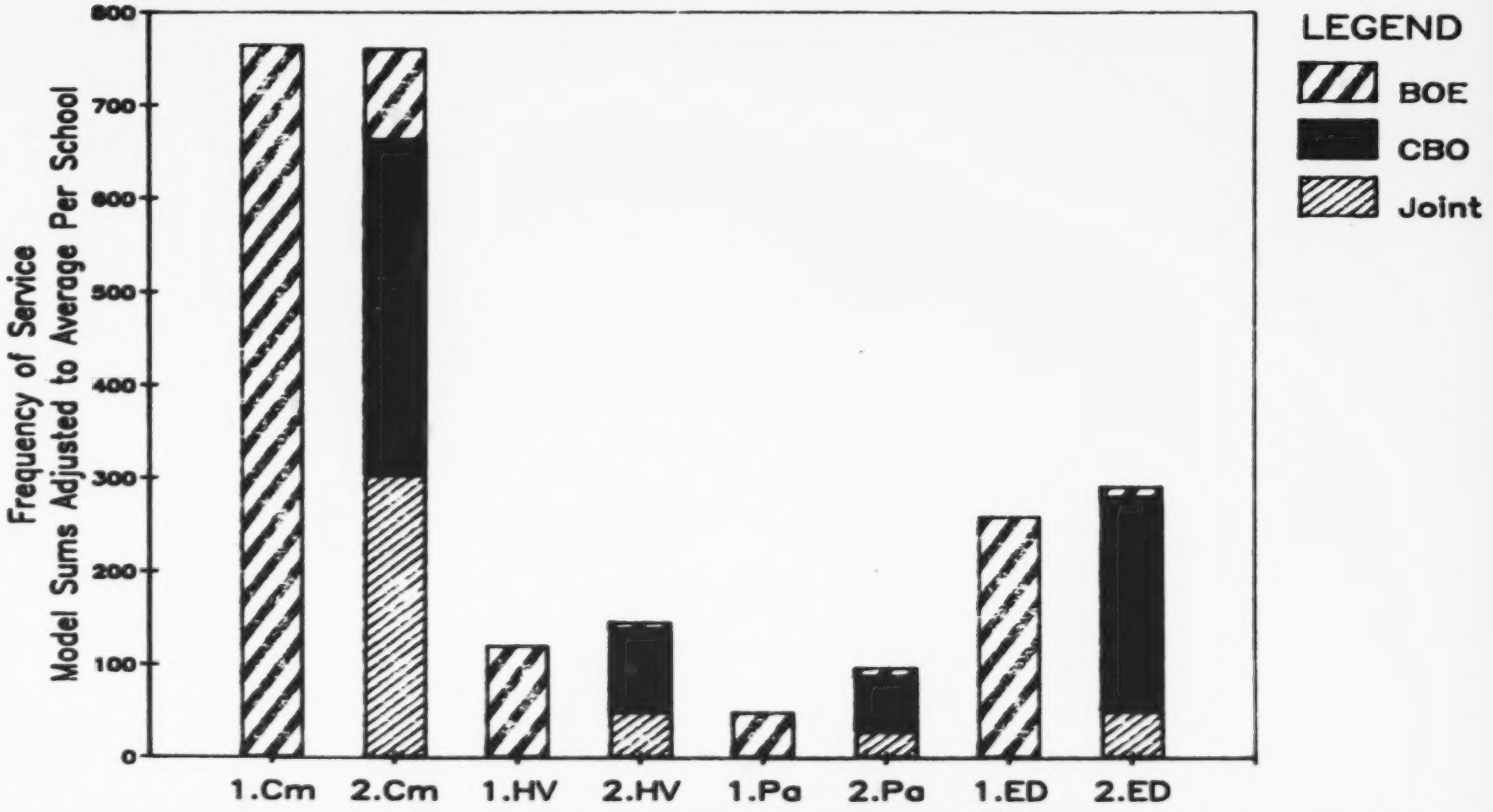
Comparison of Services Reported for the Project Connect and CBO Models

Figures 3-1 and 3-2 display the relative frequencies of the services reported for the schools in the two models, Project Connect and CBO. Contact with health staff and high school linkage are not included in these comparisons. The District 9 schools have been omitted from this comparison. The frequencies have been adjusted to reflect an average per school, by dividing the total number of services reported in each category for all 15 PC schools by 15, and the corresponding number in each category for the 11 CBO schools by 11. For the CBO schools, the figures indicate the proportions of services reported by BOE staff, by CBO staff, and by BOE and CBO staff jointly.

Slightly more services were reported for the CBO schools than for the PC schools in all categories except Parent Conference-Guidance and Individual and Group Student Guidance, where the CBO schools reported substantially higher frequencies. These higher frequencies, moreover, were spread over fewer students, since the average number of targeted students for the CBO schools overall was closer to 100 than to 150. It must be remembered, however, that CBO records were not monitored by OSP

Figure 3-1

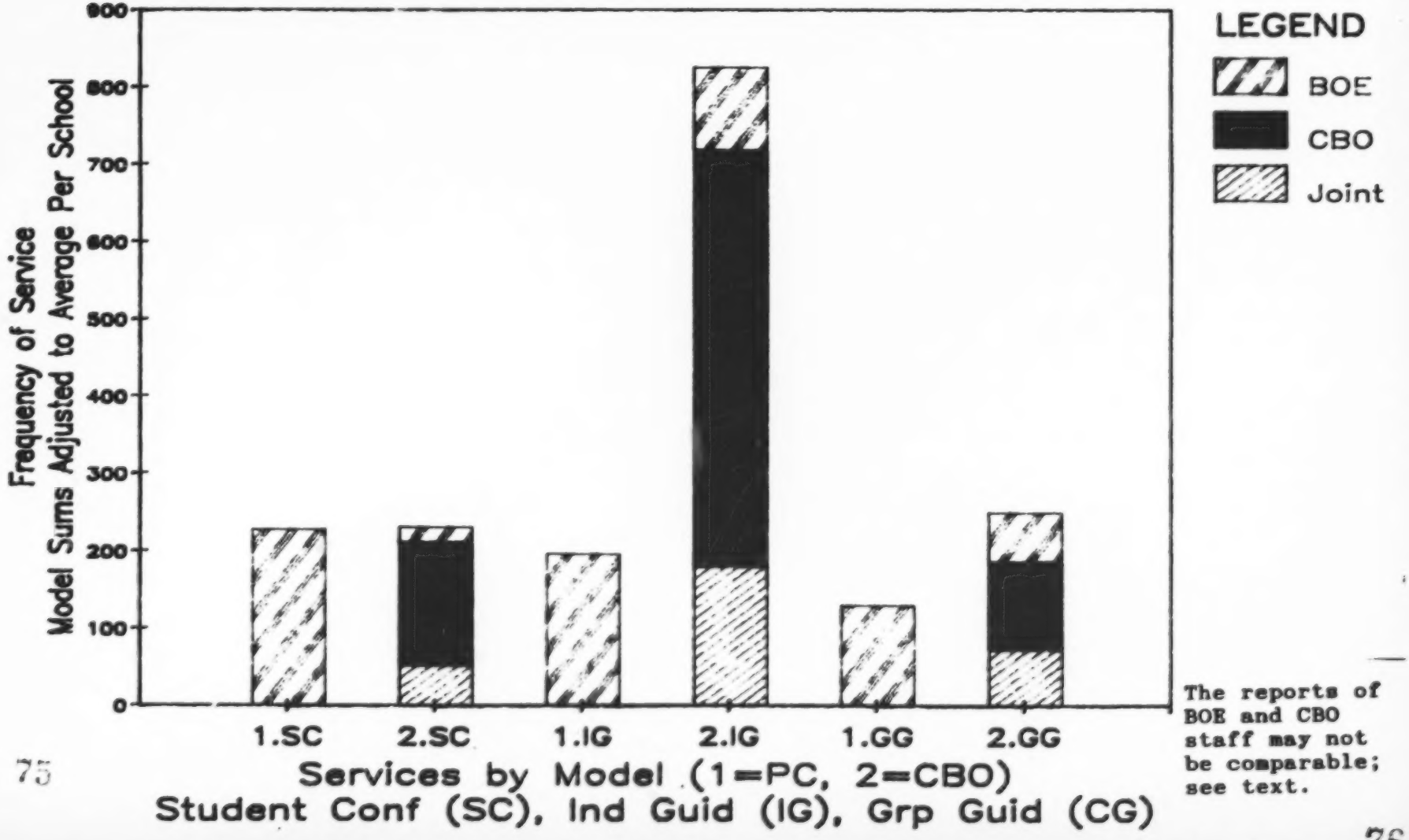
Model Level Analysis of Selected Services Reported by BOE and/or CBO Staff in Nov, Feb, and May 1986–87 Combined



Mail+PerTel(Cm), Home Vis(HV), ParentConf/Gd(Pa) ExtendDay(ED)

Figure 3-2

Model Level Analysis of Selected Services Reported by BOE and/or CBO Staff in Nov, Feb, and May 1986–87 Combined



The reports of BOE and CBO staff may not be comparable; see text.

as BOE records were, so that the same documentation guidelines were not applied to the two sets of schools.

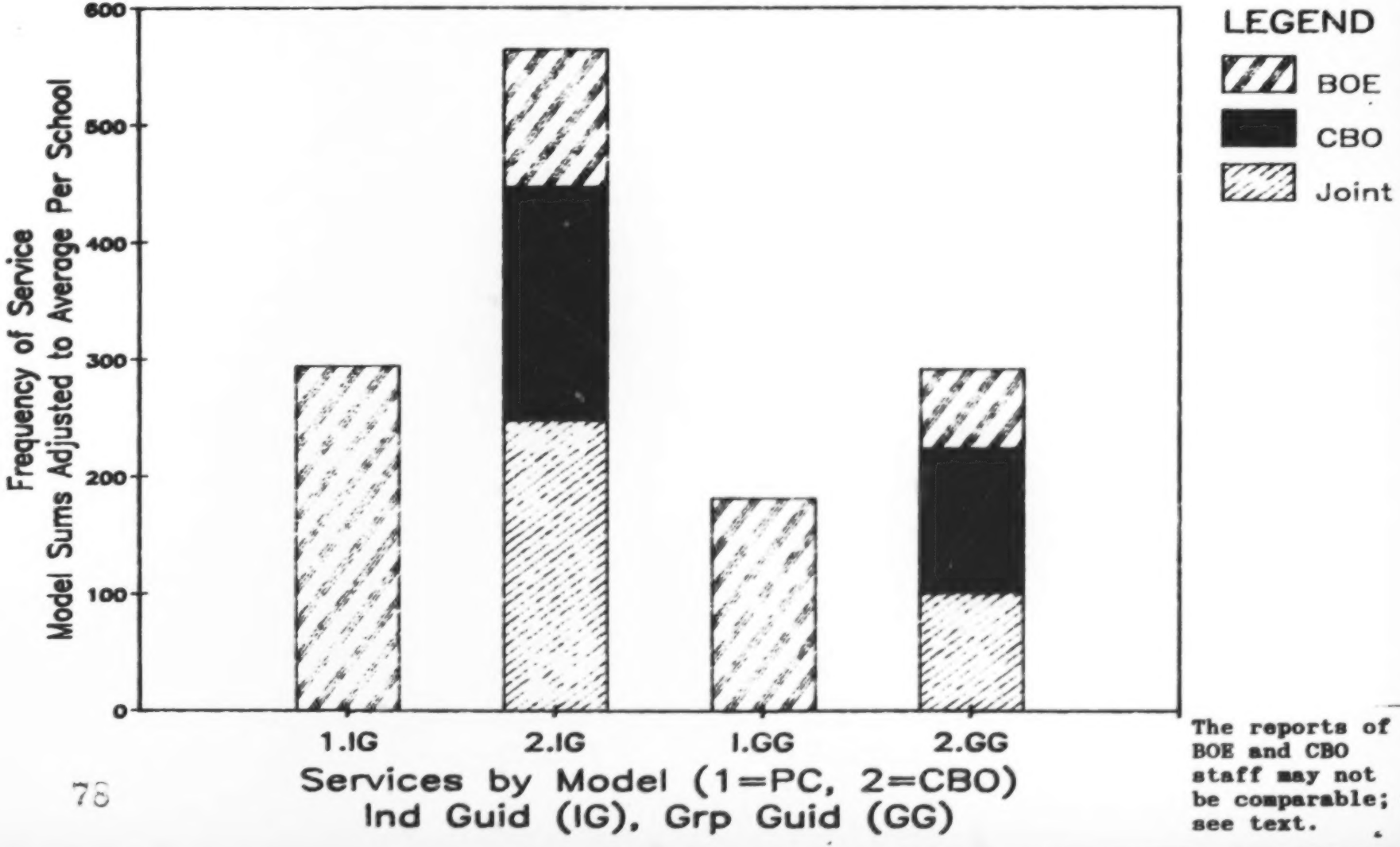
The Project Connect schools include schools from District 14, where no guidance personnel were hired for DPP staffs in 1986-87, and District 7, where family assistants had been trained for SAPIS work but did not receive SAPIS appointments until the middle of the year. From the standpoint of looking at the effects of the PC and CBO models, it could be argued that not hiring guidance personnel is a risk that might be associated with one or the other model, and so all schools assigned to the model should be included in the analysis. However, it might also make sense to look at schools that more nearly represent implementation of the model, and for this purpose the District 7 and District 14 schools would not be included. By the same reasoning, District 9 schools have been excluded from the model comparisons already, and for the specific purpose of a comparison of guidance services in PC and CBO schools, we will now exclude District 3, the Rheedlen figures being excessively high in the guidance categories (due to a different interpretation of how to count student contacts as guidance). Figure 3-2A shows the average number of individual and group guidance sessions reported respectively for the 9 Project Connect schools of District 10, 17, and 32, and the 8 CBO schools of Districts 15, 19, and 27. The PC schools averaged a total of 295 individual guidance sessions reported per school in November, February, and May combined, while the CBO schools averaged 590 sessions per school. Similarly, the PC schools averaged 183 students reported having group guidance sessions, and the CBO schools 298 students in group guidance. The guidance sessions in the CBO schools are shown to have emanated from BOE, CBO, and joint BOE-and-CBO staff in different proportions. As would be expected, the guidance services from BOE staff rise, and those from CBO staff fall, in their smaller set of schools compared with the larger set compared in Figure 3-2. Still, the guidance services reported for the CBO schools almost double those reported for the PC schools, and one surmises that this is attributable to differences in the actual delivery of services in schools of the two models as well as different ways of categorizing services as guidance.

Levels of Students Conference and Guidance Contacts Reported for the PC and CBO Model Schools

A question that is emerging as very important to answer in both the middle schools and the high schools is what proportions of students receive different levels of service from the different service providers. For this purpose we have summed all of the services of a given kind recorded for a given student on the MSSRs of November, February, and May combined. The analysis here concentrates on just the individual student conference or guidance contacts and the guidance contacts. Individual student conferences and guidance sessions have been combined, not because we do not recognize the potential distinction between a

Figure 3-2a

Guidance Services in Selected Schools Reported by BOE and/or CBO Staff in Nov, Feb, and May 1986–87 Combined



The reports of BOE and CBO staff may not be comparable; see text.

conference and guidance, but because we think it was not recognized consistently in the recording of these data. Thus the emphasis here is on individual contacts with students in which there might have been some discussion of a matter of concern to a student.

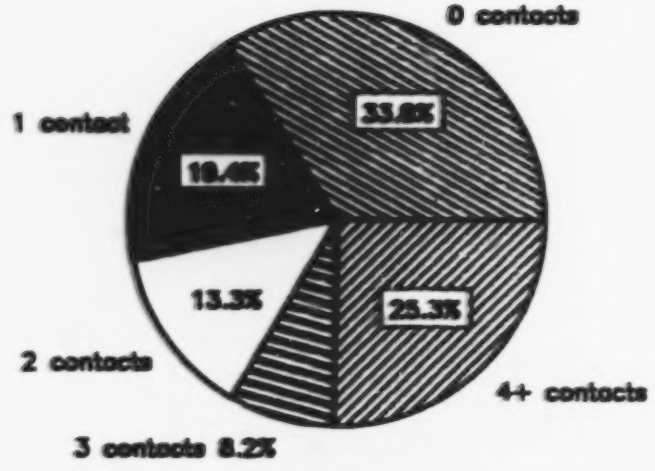
Figure 3-3 shows the proportions of students receiving five different levels of individual conference/guidance contacts: zero contacts during the three months combined, one, two, three, and four or more contacts. The proportions are displayed separately for the Project Connect and the CBO schools (not including the District 9 schools). We will concentrate just on the extremes of the distribution. In the PC schools, zero individual conference or guidance contacts were reported for 33.8% of the targeted students; in the CBO schools, zero individual contacts were reported for just 9.4% of the students. At the other end, 4 or more individual conference or guidance contacts were reported for 25.3% of the PC students and for 67.8% of the CBO students.

Figure 3-4 presents similar statistics for the levels of group guidance sessions recorded for individual students during the three months examined. Again we will cite the figures at the extremes. In the PC schools, 63.8% of the targeted students did not participate in any group guidance sessions during these three months, and 8.4% participated in four or more sessions. In the CBO schools, 45.4% did not participate in a group guidance session during these three months, and 19.4% participated in four or more sessions.

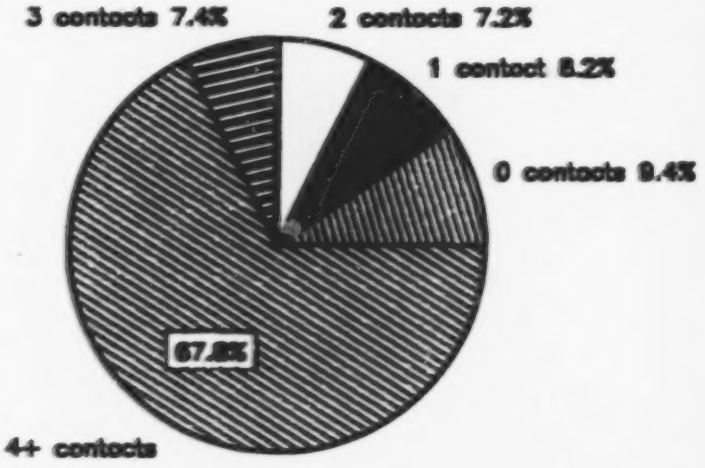
We have to say once again that the criteria for identifying a contact with a student as a guidance session varied between the PC and CBO schools. However, our combining individual conference and guidance contacts should offset that to some degree. A different factor that the analysis in Figures 3-3 and 3-4 does not take into account is the lower number of students served on the average in the CBO model schools than in the PC model schools, outside of District 27. Still, the findings raise the possibility that the CBO schools had a different strategy for monitoring the distribution of guidance-related services to students, in addition to the possibility that they provided more guidance-related services to targeted students. At the same time, the figures suggest that relatively few students were participating in regular group guidance sessions in either the PC or the CBO model.

Figure 3-3

Percents of Students Receiving Different Numbers of Individual Conference and Guidance Contacts (Summed) Reported for Models in Nov, Feb, and May 1986–87 Combined



Project Connect

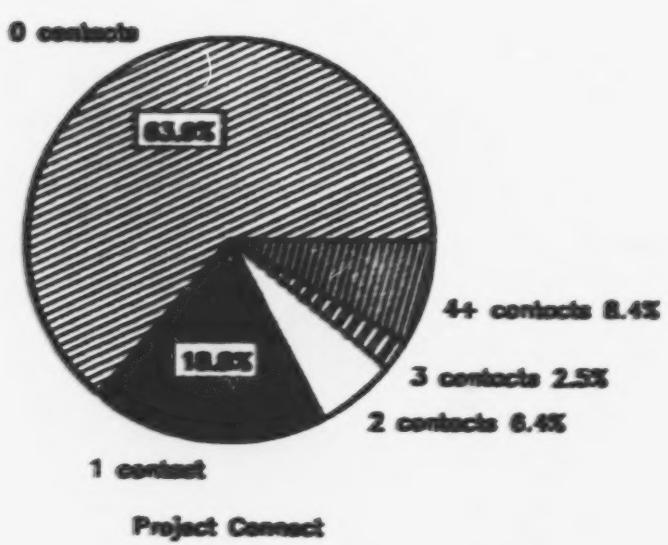


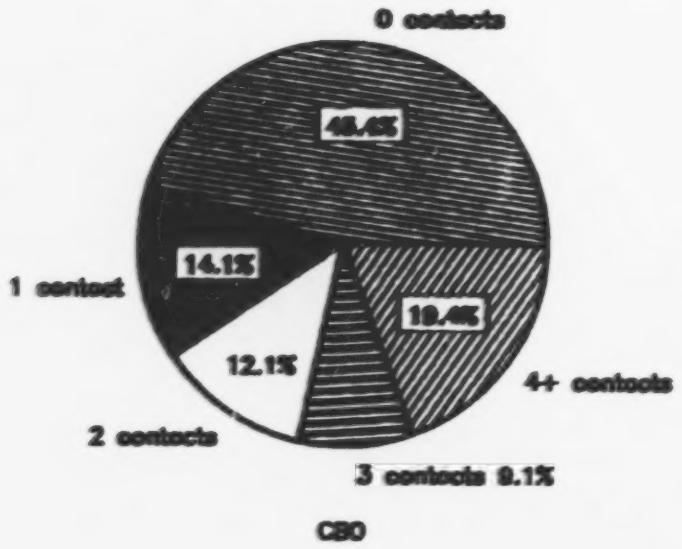
CBO

The reports of BOE and CBO staff may not be comparable; see text.

Figure 3-4

Percents of Students Receiving Different Numbers of Group Guidance Contacts Reported for Models in Nov, Feb, and May 1986–87 Combined





The reports of BOE and CBO staff may not be comparable; see text.

Chapter Four

PROGRAM OUTCOMES FOR MIDDLE SCHOOL STUDENTS PARTICIPATING IN THE DROPOUT PREVENTION INITIATIVE, 1986-87

Introduction

The program guidelines for the Dropout Prevention Program, as described in Chancellor's Special Circular #25 (1985-86), specified the following minimum performance objectives for middle school programs:

1) A minimum of 50 percent of the students provided with dropout prevention services will have 1986-87 attendance that is better than in 1985-86.

2) A minimum of 50 percent of the students who failed at least one subject during 1985-86 will pass at least one more subject in 1986-87 than they did the previous year.

3) Starting with 1985-86 as a baseline year, a minimum of 50 percent of the students, ninth grade or below, will still be in school three years later.

4) A minimum of 50 percent of the middle school students will be promoted to the next highest grade at the end of the school year.

This chapter will discuss student outcomes in attendance and academic performance for Year Two. The outcomes for grade promotion and persistence in school will be discussed in a later report on the longitudinal results of the Dropout Prevention Initiative.

The average attendance of Year Two program participants declined 1.6% from prior year levels, and students passed on average 4.2% more courses than they had the year before. These global outcomes represent a very slight improvement over the Year One program performance, when students attended about 4% fewer days and passed about 1.5% more courses than the year before. However, they indicate that the middle school Dropout Prevention Program is having only a negligible impact on the attendance and academic achievement of students. Furthermore, by themselves, these statistics tell little about how well the program worked for different kinds of students, what program services had the greatest impact on students, or where the program was most successful. This chapter will analyze program outcomes at the school, district, and model level, and will also explore the relationships among student characteristics, services, and outcomes.

Outcome Differences Among Schools

Attendance. Table 4-1 shows, for targeted students in each middle school in the Dropout Prevention Initiative, the average prior year attendance rate, the 1986-87 average attendance rate, and the percent change. (Attendance rate is calculated as a proportion, using the formula number of days present divided by the sum of days present plus days absent.) Overall, the average attendance of targeted middle school students in Year Two of the Dropout Prevention Initiative was 76.7%, a decline of 1.6% from the students' average attendance of 78.0% in 1985-86. (These numbers do not correspond exactly, since each average is figured on a slightly different number of students, due to missing data.) This decline represents 2.9 more school days absent in 1986-87 than in 1985-86, assuming a 180-day school year.

Targeted students in School 18 had the lowest average Year Two attendance rate (65%), while School 16 had the highest rate (85.4%). School 18 also showed the greatest decline in attendance (-6.7%), while School 19 reported the greatest increase in attendance from 1985-86 to 1986-87 (+4.5%). Seven of the 29 schools showed increases in average attendance from Year One to Year Two; they are Schools 16 (+1.18%), 17 (+4.3%), 19 (+4.5%), 29 (+.9%), 31 (+.6%), 38 (+3.4%), and 40 (+1.0).

In all schools, some program students improved their attendance. Table 4-2 shows the number of students in each school who did so, and the average attendance gains for these "improvers." Overall, 1363 (35%) of the targeted students showed attendance improvement from 1985-86 to 1986-87, with an average improvement of 8.9%. Conversely, 1393 students (36% of the total) showed attendance declines, with an average decline of 11.8% from 1985-86 to 1986-87. This outcome fell short of the minimum performance objective that 50% of the targeted students would show an attendance improvement. However, full attendance data were missing for 1166 students, representing 30% of the target group. Conceivably, some of these students could have had attendance gains, bringing the outcome closer to the performance objective. The attendance improvers did represent 50.5% of the students with complete data.

Within school year 1986-87, there was an average 3.6% percent decline in attendance for targeted students from the fall to the spring semester (approximately 3.2 fewer days per semester). Some schools (such as School 25 with an 8.2% drop) had more severe declines in attendance than the others, while Schools 21 (.5%) and 33 (.03%) showed essentially no change or a slight increase.

Courses passed. There were large differences among schools with regard to changes in the average proportion of subjects passed from 1985-86 to 1986-87. Program students as a whole had passed an average of 64.7% of their courses in 1985-86, and passed 70.1% during the evaluation year. The overall change (for students with full data) of 4.2% in the proportion of subjects passed is small; it represents about a fifth of a course for a

TABLE 4-1

Change in Attendance for Targeted Students
DPP Middle Schools, 1986-87

School Code	N	Average 1985-86 Attendance	Average 1986-87 Attendance	Change	Rank
OVERALL	2756*	78.0 %	76.7 %	-1.59 %	
14	107	77.2 %	76.0 %	-1.15 %	14
15	91	80.2	77.0	-2.79	20
16	63	82.7	85.8	1.18	4
17	67	77.5	78.5	4.35	2
18	121	71.5	65.3	-6.71	29
19	55	76.2	79.8	4.45	1
20	118	77.8	77.9	-0.72	11
21	113	85.2	83.9	-2.37	19
22	78	74.0	73.0	-1.63	16
23	40	83.6	83.0	-0.73	12
24	92	77.7	71.2	-5.68	28
25	101	73.8	73.4	-1.09	13
26	196	75.3	72.2	-3.83	25
27	77	79.3	78.9	-0.45	10
28	126	80.2	76.8	-3.71	23
29	132	79.4	80.8	0.94	6
30	98	76.8	76.4	-0.3	9
31	111	79.0	80.1	0.61	7
32	58	79.4	77.6	-3.79	24
33	115	81.8	80.0	-1.73	17
34	52	69.0	70.3	-3.51	21
35	115	83.0	83.3	-0.25	8
36	127	82.9	81.2	-1.88	18
37	57	78.0	73.8	-3.53	22
38	109	71.1	75.0	3.44	3
39	104	79.5	75.6	-4.68	26
40	72	71.6	74.3	0.97	5
41	95	78.8	76.9	-1.47	15
42	66	76.2	73.9	-4.77	27

* Due to missing data, the sample sizes used in the computation of each variable differ. The numbers given here are the samples for the change scores. (Total students in program = 3922.)

Table 4-2

Targeted Students Who Had Attendance Gains in 1986-87
DPP Middle Schools

School Code	Total DPP Students	# of Students with Attendance Improvement	% of Total	Average Attendance Gain of Improvers
OVERALL	3922	1363	35 %	8.9 %
14	130	59	45 %	7.9 %
15	131	42	32	8.8
16	101	36	36	9.8
17	164	44	27	10.3
18	174	46	26	11.1
19	99	37	37	10.9
20	147	58	39	7.9
21	143	47	33	6.4
22	110	40	36	10.2
23	49	22	45	4.9
24	137	37	27	7.9
25	161	46	29	14.1
26	234	76	32	8.2
27	102	49	48	8.2
28	172	55	32	7.3
29	160	66	41	12.3
30	114	50	44	8.2
31	133	67	50	8.1
32	106	27	25	5.8
33	156	49	31	8.5
34	95	29	31	8.0
35	146	61	42	7.3
36	156	65	42	7.6
37	115	25	22	7.7
38	152	69	45	10.8
39	175	41	23	6.9
40	106	43	41	10.4
41	150	48	32	9.1
42	104	29	28	9.5

student with a five-course program. However, some schools showed relatively large increases in proportion of subjects passed, while others showed decreases, as can be seen in Table 4-3. Schools that did well on this outcome variable were School 29 (+28.4%) and School 36 (+22%), while School 37 had the largest decrease in the proportion of subjects passed (-22%). A change of 20-25% represents an average change of one additional course passed or failed.

Of the targeted students who were known to have failed at least 1 course in 1985-86 (2108 students did so), 1252 or 59.4% passed at least 1 more course in 1986-87 than they had the previous year. This outcome exceeded the program's minimum performance objective that half of the students with at least 1 course failure in 1985-86 would pass at least one more course in 1986-87 than they had the previous year. (As with the attendance outcomes, full data were missing for many students, in this case 648 students or 17% of the total population.) Schools varied quite a bit on this outcome, as they did on average proportion of courses passed overall (Table 4-4). Unfortunately, however, of the 1166 students who had failed no courses 1985-86, 426 (36.5%) failed at least 1 course in 1986-87.

Test scores. Regrettably, it is not meaningful to use standardized reading and math tests to assess outcomes in student achievement. DRP (reading) and MAT (math) scores cannot be validly compared between 1985-86 and 1986-87, since the distribution of percentile scores deviate markedly from the normal distribution, and their comparability is therefore highly questionable. Furthermore, almost 40% (1487) of the targeted students have no recorded 1986-87 MAT scores; these scores are missing for fully 98.7% of the Year Two ninth-graders.

The 1986 mean DRP percentile score for the Year Two targeted students was 42.6%, whereas in 1987 the mean DRP percentile score for these students was 44.8%. However, due to the problems cited above, we are unwilling to conclude that this apparent change represents an improvement in reading achievement among targeted students.

In 1985-86, the average MAT percentile score was 28.1; in 1986-87 the average MAT percentile score was 25.3 percent. School 32 had the lowest mean MAT score in 1986-87 (17.1), while School 30 had the highest mean score (37.8).

Outcome Differences for Schools, Controlling for Student Background Characteristics

Until now, this discussion of the program outcomes for attendance and subjects passed has not taken into account the pre-existing differences among targeted students in the various schools. Students' prior attendance and academic achievement have a strong effect on their later performance, and any attempt to determine how effective different school programs are must first consider whether the schools are dealing with very

TABLE 4-3

Change in Proportion of Courses Passed for Targeted Students
DPP Middle Schools, 1986-87

School Code	N	% Courses Passed in 1985-86	% Courses Passed in 1986-87	Change	Rank
OVERALL	3269*	64.7 %	70.1 %	4.2 %	
14	109	56.5 %	77.3 %	19.1 %	3
15	109	50.2	69.6	18.3	4
16	98	64.2	69.3	4.5	10
17	134	73.8	72.4	-2.5	24
18	139	43.7	48.6	4.1	11
19	93	66.8	82.2	15.3	6
20	112	82.5	81.5	-1.3	20
21	103	73.8	81.3	3.1	15
22	96	67.3	70.4	1.3	17
23	44	87.3			29
24	116	55.1	56.0	-0.6	18
25	116	54.6	52.1	-0.8	19
26	197	61.1	80.1	15.3	5
27	89	76.0	75.6	-2.4	23
28	140	81.3	66.0	-15.8	27
29	135	48.9	78.6	28.4	1
30	95	67.2	66.7	-1.8	22
31	105	66.8	78.9	10.2	8
32	87	50.2	53.1	3.6	13
33	142	81.6	76.6	-6.2	25
34	80	47.3	56.2	3.7	12
35	133	85.1	74.4	-10.8	26
36	142	49.9	72.4	21.7	2
37	96	75.6	56.7	-21.8	28
38	137	68.9	79.0	8.6	9
39	137	54.2	62.9	3.4	14
40	95	65.4	77.5	12.2	7
41	137	71.8	70.3	-1.5	21
42	98	61.5	64.9	2.5	16

* Due to missing data, the sample sizes used in the computation of each variable differ. The numbers given here are the samples for the change scores, except for School 23, where the sample is the number of students for whom 1985-86 information was available. (Total students in program = 3922.)

TABLE 4-4

Targeted Students Who Had Gains in Courses Passed in 1986-87
DPP Middle Schools

School Code	Total DPP Students	# of Students with 1+ Failures in 1985-86	# of Students with Gains in Courses Passed	% of Students with Prior Failures	Avg. Gain in Number of Courses Passed
OVERALL	3922	2108	1252	59.4 %	
14	130	76	54	71.1 %	1.87
15	131	88	58	65.9	1.95
16	101	61	37	60.7	1.70
17	164	67	36	53.7	2.11
18	174	113	47	41.6	2.17
19	99	50	37	74.0	1.78
20	147	65	48	73.8	2.50
21	143	43	30	69.8	2.00
22	110	54	32	59.3	1.94
23	49				
24	137	103	45	43.7	3.02
25	161	92	49	53.3	2.31
26	234	116	82	70.7	2.13
27	102	43	23	53.5	1.74
28	172	56	21	37.5	1.52
29	160	130	104	80.0	3.46
30	114	60	20	33.3	1.20
31	133	95	60	63.2	2.90
32	106	75	46	61.3	2.46
33	156	55	32	58.2	1.50
34	95	60	28	46.7	2.25
35	146	48	23	47.9	1.76
36	156	134	95	70.9	1.76
37	115	54	38	70.4	2.68
38	152	72	50	69.4	1.98
39	175	91	43	47.3	2.60
40	106	57	36	63.2	2.33
41	150	87	47	54.0	1.43
42	104	63	31	49.2	1.61

different populations. It would not be valid, for instance, to to simply report that one school's DPP program with a 75% improvement in attendance was more successful than a program with a 50% improvement rate, unless we knew whether the two schools served students who differed greatly in their background characteristics and thus their responsiveness to the Dropout Prevention Program.

Chapter 2 discussed differences among schools in the types of students who were enrolled in their dropout prevention programs. Some schools had targeted students who started with relatively low prior attendance rates (e.g., 69% in School 34 and 71.5% in School 18), while targeted students in other schools had much higher prior attendance rates (especially School 21 with 85.2%). There were also large differences among the schools' targeted groups along the dimension of prior proportion of courses passed, as well as on other important student characteristics such as overage or reading ability.

We used regression analysis to examine school differences on the outcome variables, because it is able to correct for initial student differences and is fairly easy to interpret. In regression analysis, the current year's outcome variable (attendance rate, courses passed, and so on) is adjusted by using the previous year's value for each student as a control variable. In effect, this technique removes that portion of the program outcome that one would expect to see based on students' prior performance and isolates the effects the programs themselves are having on student outcomes. Because the adjustments are almost certainly imperfect and incomplete, caution must be used in interpreting the results of regression analysis. The probable effects of the limitations of the technique are that: a) schools are actually closer to each other on the adjusted outcome variable than results indicate, and b) the effectiveness of programs is probably underestimated. The latter point means that when, for example, a treatment is estimated by regression to have a small negative effect, in truth it is likely that the effect was either none at all or a small positive one. Similarly, a treatment with a small positive effect on the regression analysis probably has a larger positive effect.

Attendance. We first examined the difference between schools in their 1986-87 average attendance rates for targeted students, after controlling for prior year attendance. (For students admitted to the program in the spring, only spring attendance figures were used.) Two independent variables were included in the regression equation: first, the student's prior year (1985-86) attendance, and then a code number representing the school in which the student was enrolled.

We found that prior attendance explained 31.8% of the variance in 1986-87 attendance; that is, a student's previous attendance history was strongly related to attendance during the year in question. The particular school in which a student was enrolled had a much smaller relation to the outcome measure, explaining only 2.8% of the variance after prior attendance was

controlled. This means that less than 3 percent of the net variation in students' 1986-87 attendance can be explained by knowing which school they attended. However, schools did differ in the average attendance of their targeted students, once the prior attendance rates of those students were controlled for. Students in School 18 had the lowest attendance in 1986-87, net of their prior attendance, and students in School 17 the highest; the difference between these average attendance rates was 12.8%. Figure 4-1 displays the range of attendance rates, adjusted for student differences in prior attendance, by setting School 15 at "0" as a reference point and showing how much the other schools differed from this school. For example, when compared with School 15, the adjusted 1986-87 attendance rate of targeted students in School 18 was 6.4% lower than School 15, the rate for School 24 was 3.8% lower, and School 42's rate was 3.2% lower. Schools 17, 19, and 16 showed the highest 1986-87 attendance rates for targeted students, after controlling for prior attendance. When compared with School 15, School 17's attendance was 6.4% higher than School 15, School 19 had 5.8% higher attendance, and School 16 had 5.1% higher attendance. It is interesting to note that School 18, the school with the lowest Year 2 attendance rate and the largest decline in attendance from Year 1 to Year 2, also had the lowest attendance rate after controlling for prior attendance. Conversely, School 19, which had the greatest attendance gain from 1986-87, maintained a high rate after controlling for students' prior attendance.

Proportion of subjects passed. We also produced a regression analysis using the proportion of subjects passed in 1986-87 as the dependent (outcome) variable. The proportion of subjects passed in 1985-86 was used as a control variable, so that prior year student differences in academic performance would be taken into account. (We excluded School 23 from this analysis because it did not report subjects passed and failed for the 1986-87 school year.) The proportion of subjects passed in 1985-86 was found to account for 11.5% of the variance in the outcome variable (1986-87 courses passed). This proportion of variance accounted for is relatively low, meaning that although students who showed poor course performance before the program started were more likely also to show poor performance during the program year under study, this relation is not very strong. It may be that program participation is interfering with an otherwise very strong correlation between academic success from one year to the next.

Schools were found to explain 5.9% of the variance in the proportion of subjects passed, after controlling for students' initial differences in subjects passed. There is a difference of 31.8% between the school whose students had the highest adjusted proportion of subjects passed (School 29) and the school with the lowest adjusted proportion of subjects passed (School 37). In Figure 4-2, School 27 is used as a reference point, set at 0, to show the differences in school values on the courses passed outcome measure, after individual student differences are accounted for.

FIGURE 4-1

Relative Differences Among Schools in Adjusted Average Attendance Rates: Present Year Attendance Net of Prior Year Attendance DPP Middle Schools, 1986-87

SCHOOL CODE	18	24 34 42	26	39 37 28 22	15 25 32 14	41 36 30 33 20 40 27 21	31 35 29 38 23	16	19 17
	-6.4% BELOW SCHOOL 15	-3.8% BELOW SCHOOL 15	-1.5% BELOW SCHOOL 15	0 (REFERENCE POINT)		1.5% ABOVE SCHOOL 15	3.5% ABOVE SCHOOL 15	5.1% ABOVE SCHOOL 15	6.4% ABOVE SCHOOL 15

Note: These rankings are based on the b coefficients of the regression analysis where the dependent variable is current year attendance, the independent variable is school, and prior year attendance is entered as a control variable.

Example: the b coefficient for School 15 is .064 (set at 0)
the b coefficient for School 37 is .049 (1.5 below School 15)

FIGURE 4-2

Relative Differences Among Schools
in Adjusted Average Proportion of Courses Passed:
Present Year Courses Passed Net of Prior Year Courses Passed
DPP Middle Schools, 1986-87

SCHOOL CODE	37	18 25	32 24 28 34	39 30 42	35 41 17 16 22 33 27	15 20 21 38 40 36 31	26 14	19	29
	-18.9% BELOW SCHOOL 27		-10.1% BELOW SCHOOL 27	-5.4% BELOW SCHOOL 27	-2.3% BELOW SCHOOL 27	0 (REFERENCE POINT)	4.5% ABOVE SCHOOL 27	6.6% ABOVE SCHOOL 27	9.3% ABOVE SCHOOL 27	12.9% ABOVE SCHOOL 27

Note: These rankings are based on the b coefficients of the regression analysis where the dependent variable is current year proportion of courses passed, the independent variable is school, and prior year proportion of courses passed is entered as a control variable.

Example: the b coefficient for School 27 is .144 (set at 0)
the b coefficient for School 30 is .090 (5.4% below School 27)

Test scores. Schools are not good predictors of either the DRP (reading) or the MAT (math) scores after initial student differences are taken into account. Prior year (1985-86) scores account for a very large proportion of the variance in both the DRP and the MAT test scores for 1986-87. The 1985-86 DRP scores explain 60.1% of the variance in the 1986-87 DRP scores; the 1985-86 MAT scores explain 53.8% of the variance in the 1986-87 MAT scores. Schools explain only an additional .8% of the variance in the 1986-87 DRP scores. The difference between the school with the highest average 1986-87 DRP scores (School 27) adjusted for prior scores and the one with the lowest adjusted scores (School 16) is just 7.35%. Schools explain more but still not much (1.5%) of the variance in the 1986-87 MAT scores after the 1985-86 MAT scores are entered as control. The difference between the school with the highest adjusted scores (School 20) and those with the lowest adjusted MAT scores (Schools 30 and 37) is 9.9%. Of course it could be that schools have a lot to do with how students scored on the tests in the prior year, but the data available do not allow us to examine this.

Outcome Differences Among Districts

The 29 middle schools in the Dropout Prevention Initiative are located in 10 decentralized community school districts. A district-level analysis of the program is appropriate, for several reasons. First, in the CBO model, all schools in a district work with the same CBO, so it is possible to compare the effectiveness of the different community-based organizations by comparing the outcomes across districts. Second, the community school districts have a major role in the implementation of the program at the school level. District facilitators are responsible for managing the program budgets, for providing staff development and technical assistance, and for overseeing the process of selecting students for the program. A school's success with the program is thus enhanced or constrained by factors at the district level.

Attendance. Chapter 2 described differences among the ten community school districts in the characteristics of students enrolled in the Dropout Prevention Program. The districts also differed in terms of program outcomes. The average proportion of days present for targeted students in 1986-87 ranged from 73.8% in District 9 to 80.5% in District 10 (overall attendance was 76.7%). On average throughout the program, students' attendance declined by 1.6% from 1985-86 to 1986-87. Districts 14 and 27 had the largest declines in attendance (-3.6% and -3.3%, respectively), while Districts 19, 10, and 32 were the only ones with positive increases in attendance (+.1%, +.2%, and 1.15%, respectively). Targeted students' attendance declined from the fall to the spring semesters in all districts, with an average loss of 3.6%. District 15 had the largest decline in attendance from fall to spring (-5.1%), and District 27 had the smallest decline (-1.9%). Attendance outcomes are displayed in Table 4-5

TABLE 4-5

Program Outcomes for Targeted Students, by District
DPP Middle Schools, 1986-87

District	N	Average 1986-87 Attendance	Change	N	Average 1986-87 % Courses Passed	Change
OVERALL	2756*	77.0 %	-1.6 %	3269	70.1 %	4.2 %
3	187	78.6 %	-2.5 %	283	62.8 %	3.5 %
7	250	75.0	-2.2	298	68.9	14.7
9	288	73.8	-2.7	368	59.8	-1.0
10	297	80.1	0.2	409	74.5	-6.5
14	343	78.6	-3.6	380	68.9	-3.7
15	227	75.2	-0.4	280	74.5	3.8
17	359	75.0	-2.7	386	66.1	12.3
19	210	76.5	0.1	284	68.3	-3.9
27	236	74.2	-3.3	197	80.1	15.3
32	359	77.9	1.2	384	79.6	12.6

* Due to missing data, the sample sizes used in the computation of each variable differ. The numbers given here are the samples for the change scores. (Total students in program = 3922.)

and Figure 4-3.

Proportion of courses passed. In 1986-87, targeted students in District 9 had the lowest average proportion of subjects passed (59.8%), while those in Districts 27 and 32 had the highest average proportion of subjects passed (80.1% and 79.6%, respectively). (District 27, however, is represented by only one school in the analysis of subjects passed.) The average change in the proportion of subjects passed from 1985-86 to 1986-87 was +4.2% for all students. However, there were large differences between the districts on this measure. While 4 of the districts (Districts 7, 17, 27, and 32) showed a large improvement from 1985-86 to 1986-87 in the proportion of subjects passed (+14.7%, +12.3%, +15.3%, and +12.6%, respectively), the rest of the districts showed either a very small improvement or even a decline. The largest decline in the proportion of subjects passed was shown by District 10 (-6.5%). (See Table 4-5 and Figure 4-4.)

Test scores. As was discussed before, the reading and math test scores from the 1985-86 and 1986-87 school years may not be compatible (especially for the MAT scores), and so we have not analyzed directly the changes in scores between the two years. The average DRP percentile for 1985-86 was 42.6. The lowest average percentiles that year were in District 7 and District 14 (mean percentile 37.1 and 37.3, respectively); the highest scores were in Districts 10 and 19 (mean percentile 49.2 and 49.0, respectively). The average DRP percentile score for 1986-87 was slightly higher (44.8). District 14 again showed a low average percentile (39.3) as did District 3 (39.7). The highest average scores were in District 10 (50.7) and District 15 (50.8).

The average MAT percentile for 1985-86 was 28.1; targeted students in District 3 had the lowest average scores (21.7), while District 19 showed the highest average (35.3). The pattern is similar for 1986-87, when the average percentile score was 25.3. The lowest MAT average percentile scores were again reported for District 3, together with District 17 (21.5, and 22.2, respectively). The highest MAT average percentile scores were shown again in District 19 (31.6).

Controlling for student background characteristics. We used regression analysis to determine whether students' Year Two program outcomes were affected by the school district in which they were enrolled. Results indicate that the school districts explain only .8% of the variance in 1986-87 attendance after students' prior attendance is controlled. The difference between the districts with the highest attendance outcomes (District 10) and the lowest attendance outcomes (District 27) is only 4.5%, after the adjustment for prior attendance is made. As can be seen in Figure 4-5, District 14 is about in the middle on 1986-87 attendance adjusted for prior attendance, so it is used as a reference point set at "0". District 10's attendance outcome adjusted for prior attendance is 3.5% higher than in District 14, and District 32 has 3.2% higher adjusted attendance than District 14. District 27 shows a 1.1% lower adjusted attendance rate for

FIGURE 4-3

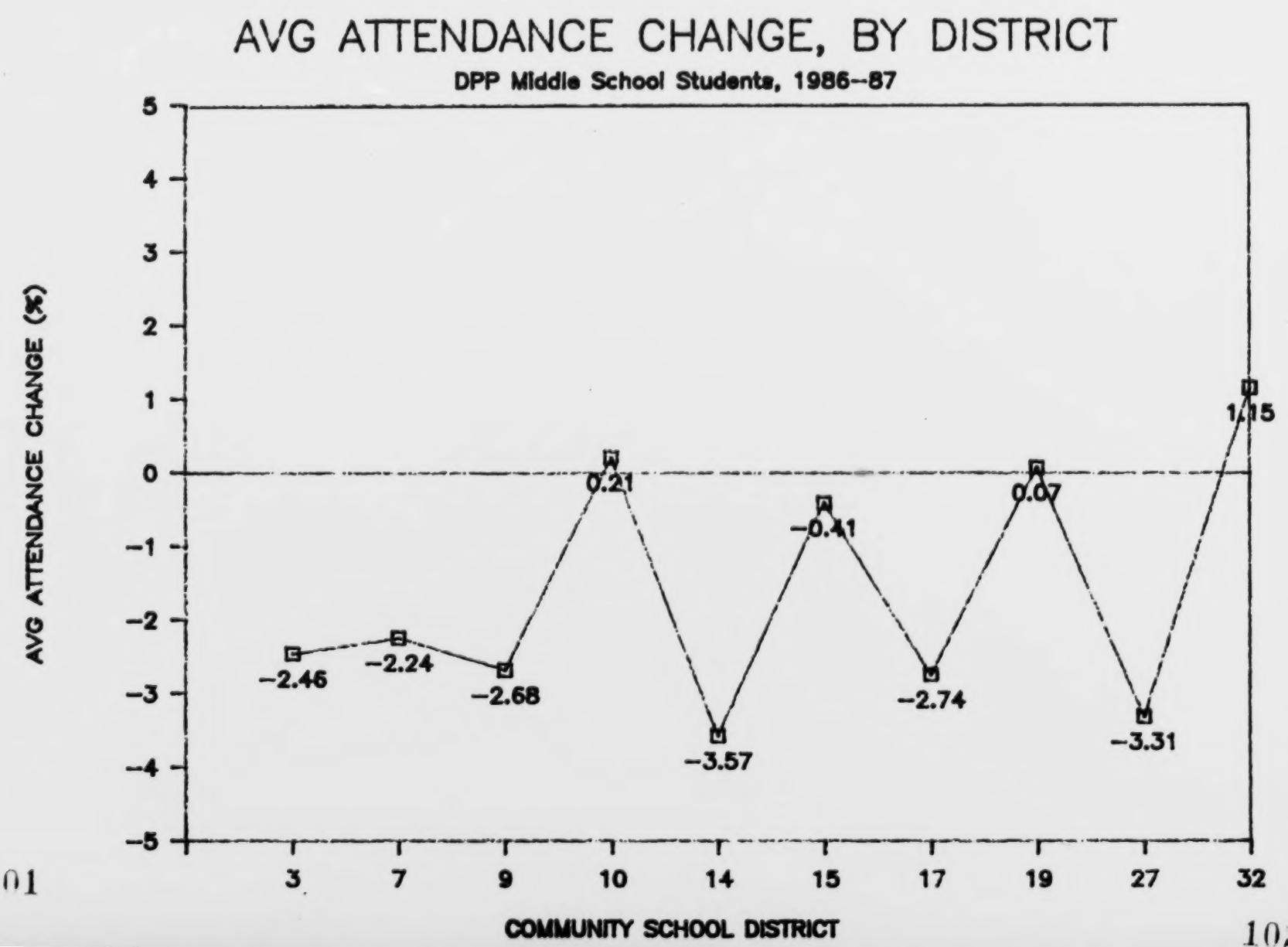

AVG ATTENDANCE CHANGE, BY DISTRICT
DPP Middle School Students, 1986--87
AVG ATTENDANCE CHANGE (%)
5
4
3
2
1
0
-1
-2
-3
-4
-5
-2.46
-2.24
-2.68
0.21
-3.57
-0.41
-2.74
0.07
-3.31
1.15
3
7
9
10
14
15
17
19
27
32
COMMUNITY SCHOOL DISTRICT

FIGURE 4-4

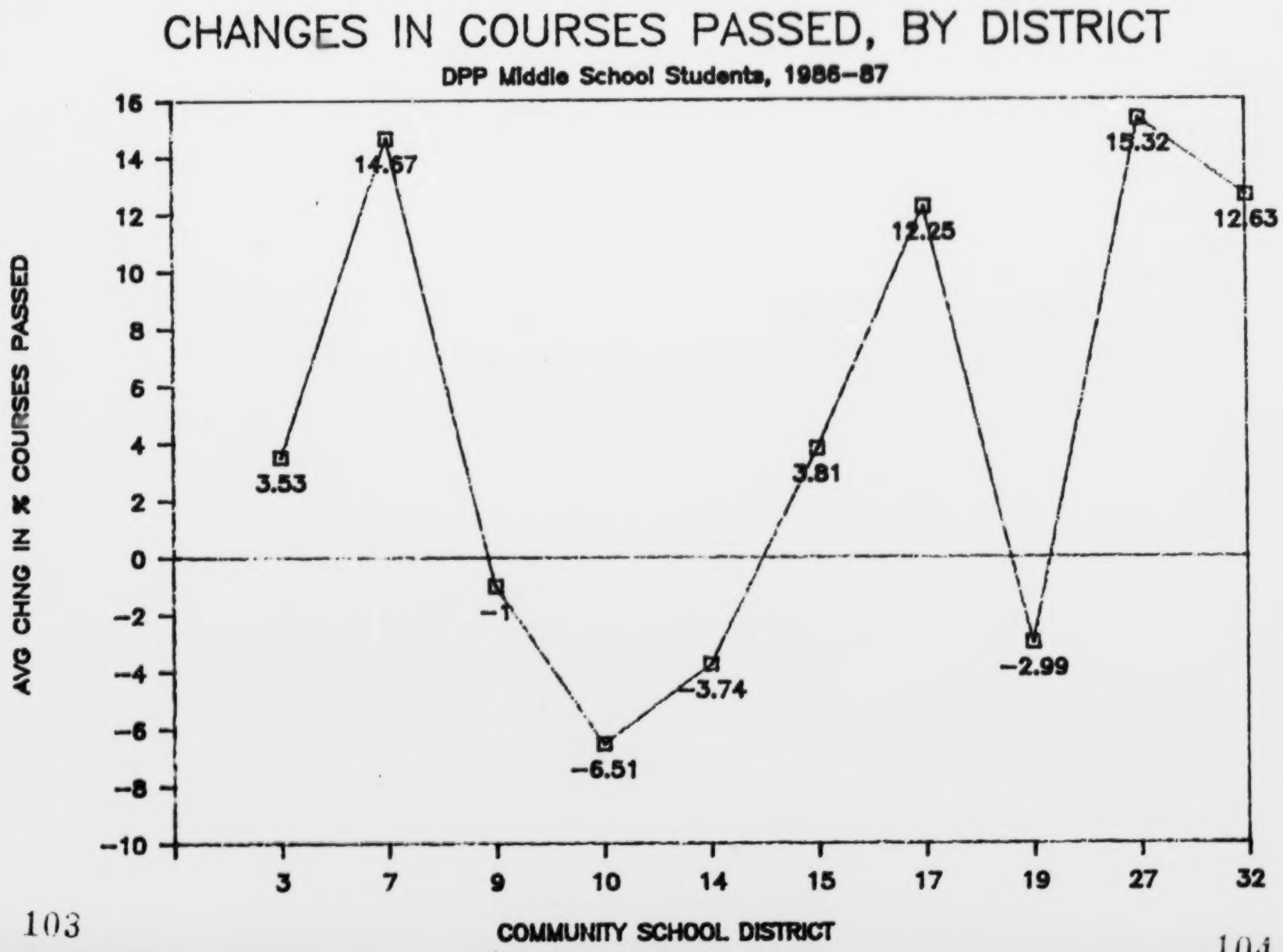
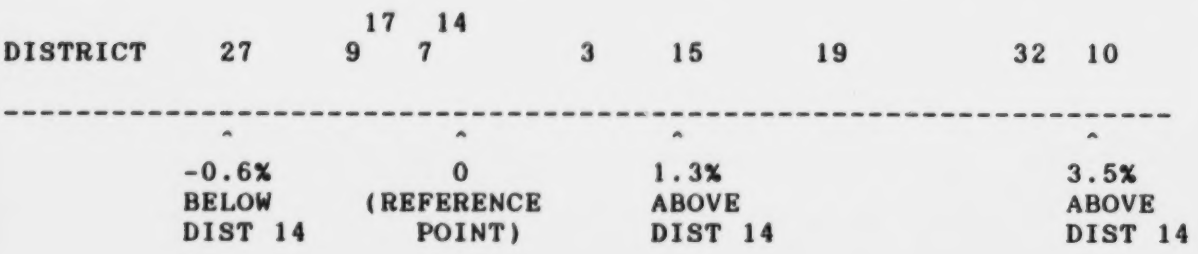

CHANGES IN COURSES PASSED, BY DISTRICT
DPP Middle School Students, 1986-87
AVG CHNG IN # COURSES PASSED
16
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
3.53
14.67
-1
-6.51
-3.74
3.81
12.25
-2.99
15.32
12.63
3
7
9
10
14
15
17
19
27
32
COMMUNITY SCHOOL DISTRICT

FIGURE 4-5

Relative Differences Among Districts in Adjusted Average Attendance Rates: Present Year Attendance Net of Prior Year Attendance DPP Middle Schools, 1986-87



Note: These rankings are based on the b coefficients where the dependent variable is current year attendance, the independent variable is district and prior year attendance is entered as a control variable.

Example: the b coefficient for District 14 is .005 (set at 0).
the b coefficient for District 10 is .040 (3.5% above District 14)

targeted students in 1986-87 than District 14, and District 9 shows an adjusted rate that is .5% lower than District 14's rate. The range between the districts with the highest and lowest adjusted average attendance is 4.6%.

Districts explain 2.4% of the variance in the proportion of subjects passed in 1986-87, after controlling for students' proportion of courses passed in 1985-86. Figure 4-6 uses District 17 as a reference point to display differences in adjusted proportions of courses passed among the districts. There is a difference of 18.1% between the district with the highest adjusted proportion of subjects passed (District 27) and the one with the lowest proportion of subjects passed (District 9). The differences between District 17 (the baseline) and Districts 27 and 32, which have the highest proportion of subjects passed net of prior performance, are 10.2% and 9.1%, respectively. (Again, it should be recalled that only one school from District 27 is included in this analysis.) District 9 and District 3 have the lowest adjusted proportion of subjects passed; the differences between them and District 17 are 7.9% and 4.8%, respectively.

Outcome Differences for the Two Middle School Models

A fundamental question for the Dropout Prevention Initiative's evaluation has been to compare the relative effectiveness of school programs that utilize the services of community-based organizations with those that use only Board of Education personnel and services. At the middle school level, this distinction is fairly straightforward, since half of the schools have CBOs (CBO model) and the other half do not (PC model). (As was mentioned earlier, the three schools in District 9 were dropped from all model-level analyses because their CBO contract was terminated and they switched program models in the middle of the year.)

Attendance. There were only small differences between the two program models in terms of the program outcomes (Table 4-6). In 1986-87, the average proportion of days present for targeted students was 76.1% for CBO students and 77.5% for PC students. The average change in attendance between the 1985-86 and 1986-87 school years was -1.5% for CBO students and -1.4% for PC students. The attendance change for students between the fall and spring semesters was exactly the same, -3.6% for both models.

Proportion of courses passed. Model-level differences in the outcome of proportion of subjects passed were also very small. The average proportion of subjects passed in 1986-87 was 70.8% for the CBO model versus 71.8% for the PC model. The average change in proportion of subjects passed from 1985-86 to 1986-87 was 4.1% for the CBO model versus 5.3% for the PC model (Table 4-6).

Tests scores. Standardized scores on the DRP and MAT tests were slightly but consistently higher for students in the CBO

FIGURE 4-6

Relative Differences Among Districts in Adjusted Average Proportion of Courses Passed: Present Year Courses Passed Net of Prior Year Courses Passed DPP Middle Schools, 1986-87

DISTRICT	9	3	14 19	10	17	15	7	32	27
	^		^		^		^		^
	-7.9% BELOW DIST 17		-3.7% BELOW DIST 17		0 (REFERENCE POINT)		3.4% ABOVE DIST 17		10.2% ABOVE DIST 17

Note: These rankings are based on the b coefficients where the dependent variable is current year courses passed, the independent variable is district, and prior year courses passed is entered as a control variable.

Example: the b coefficient for District 17 is .079 (set at 0).
the b coefficient for District 19 is .042 (3.7% below District 17).

TABLE 4-6

Outcomes for Targeted Students, by Program Model
DPP Middle Schools, 1986-87

Model	N	Average 1986-87 Attendance	Change	N	Average 1986-87 % Courses Passed	Change
OVERALL	2468*	77.0 %	-1.46 %	2901	71.4 %	+4.86 %
CBO	860	76.1	-1.53	1044	71.4	+4.06
PC	1608	77.5	-1.42	1857	71.8	+5.31

* Due to missing data, the sample sizes used in the computation of each variable differ. The numbers given here are the samples for the change scores.

District 9 was excluded from this model-level analysis.

Total students in program = 3922.
Total students in CBO model = 1240.
Total students in PC model = 2234.

model than those in the PC model. In 1985-86, the average percentile score on the DRP was 44.6 for the CBO students, against 41.1 for students in the PC model. In 1986-87, the CBO model students had an average DRP percentile score of 46.5, while the PC model students had 43.6. A similar trend is seen for the MAT scores. In 1985-86, the average percentile scores were 29.7 for the CBO model and 27.2 for the PC model. In 1986-87 the average MAT percentile scores were 27.0 for the CBO model and 24.3 for the PC model.

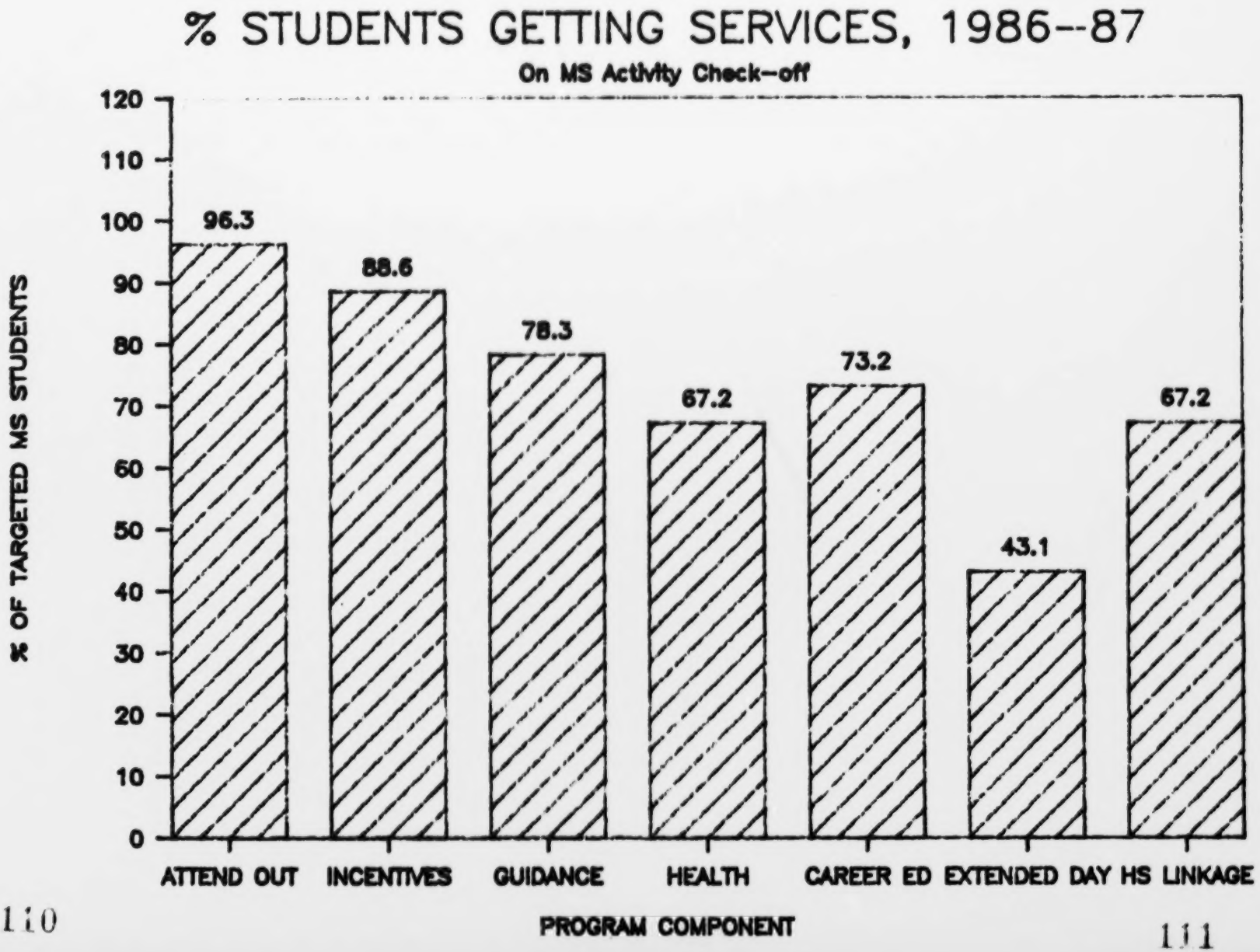
Controlling for student characteristics. As we have noted above, meaningful conclusions about model differences cannot be drawn from examining program outcomes alone; there first must be some consideration of the differences between program models in terms of students' entering characteristics. In a regression analysis that controlled for prior characteristics and then examined whether the program model in which students were enrolled had any effect on their outcomes, little effect was found. When students' prior year attendance is controlled, program models explain only .02% of the variance in attendance. Similarly, the differences between models in terms of subjects passed are not meaningful. After students' initial differences in the proportion of subjects passed in 1985-86 are controlled, the models explain only .03% of the variance in subjects passed in 1986-87.

Relationships Between Services Received and Outcomes

Targeted middle school students were supposed to receive a range of dropout prevention services that included attendance outreach, guidance and counseling, health services, school level linkages, and alternative educational programming. Chapter Three has discussed the overall levels of services provided in these categories at each school, as reflected in the Monthly Summary of Service Reports (MSSRs). For the purposes of relating services to outcomes at the individual level, we examined two sources of data on the specific services provided to students. First, program personnel used a check-off document to report whether or not individual students ever received services in each of the major service categories. The usefulness of this information is limited because it does not indicate the extent or intensity of service, but it does not have the problem of simultaneous under- and over-reporting of services which is a concern with the MSSR data. Second, we created a computerized database from three sets of MSSRs (November, February, and May). This database contains the number of contacts made with each student in each of the service categories listed on the MSSR form. We have used both types of information in analyses describing program services and relating services to outcomes.

Analyses using service check-off. The proportions of students receiving program services, according to the check-off document, are shown in Figure 4-7. Almost all targeted students (96.3%) were reported as having ever received attendance outreach services. The majority of students received performance

FIGURE 4-7


% STUDENTS GETTING SERVICES, 1986--87
On MS Activity Check-off
% OF TARGETED MS STUDENTS
120
110
100
90
80
70
60
50
40
30
20
10
0
96.3
88.6
78.3
67.2
73.2
43.1
67.2
ATTEND OUT
INCENTIVES
GUIDANCE
HEALTH
CAREER ED
EXTENDED DAY
HS LINKAGE
PROGRAM COMPONENT

incentives (88.6%), guidance and counseling services (78.3%), health services (67.2%), and career education services (73.2%). Less than half of the students took part in an extended school day program (43.1%). Participation in an in-school laboratory was reported only for students in one middle school (School 31) comprising 1.2% of the targeted students. Regarding high school linkage activities, the percentages of DPP students receiving each linkage activity were the following: a) preparing students for high school, 50.2%; b) orientation and introduction to high school, 52.1%; c) small groups or individual discussions, 29.7%; and, d) after-school program, 17.2%. Overall, 67.2% of the students received one or more of the high school linkage services. (School 23, which did not submit a check-off of services given to students, was dropped from this analysis of services.)

The 28 middle schools included in this analysis varied considerably in the proportion of students who were reported to have received the various dropout prevention services (Table 4-7). There are also large differences between the Project Connect and CBO models with regard to the provision of dropout prevention services (Figure 4-8). Similar proportions of CBO and PC students received attendance outreach services (CBO, 97.6%; PC, 97.5%), incentives (CBO, 90.9%; PC, 91.0%), and extended day programs (43.2% vs 43.7%). However, 88% of the CBO students vs. 74.2% of the PC students received guidance and counseling services. In all other categories, larger proportions of PC students than CBO students received services (71.9% vs 58.5% for health education; 91.9% vs 54% for career education, and 78.3% vs 55.2% for high school linkage services).

One of the most important issues for the program evaluation concerns the relationship between being at-risk and receiving dropout prevention services. Using the check-off data, it appears that those students who were at highest risk for dropout, defined by high level of prior absences, were also least likely to receive prevention services. This pattern was also reported in the Year One evaluation, and may simply reflect the observation that students have to be in school to receive services, and students with high prior absences are least likely to be in school. As can be seen in Figure 4-9, students who had missed more than 60 school days in 1985-86 consistently received fewer services in 1986-87 than students who had been absent fewer days that year. There was one clear exception to this pattern: students at higher risk in 1985-86 received more guidance and counseling services than other targeted students with better 1985-86 attendance.

Attendance outreach is the only dropout prevention service in which the difference in frequency for high absence (60 days) and low absence (0-15 days) students is not large. This is not surprising since all but 3.7% of the students were reported to have received outreach services. Overall, students missing a moderate amount of days (16-30) and students missing 15 or fewer days did not receive significantly different levels of services.

TABLE 4-7

Proportion of Targeted Students Receiving Program Services
DPP Middle Schools, 1986-87

School Code	Attn Out	Attn Incv	Guid/ Couns	Health	Career Ed	Extended Day	Linkage
OVERALL	96.3 %	88.6 %	78.3 %	67.2 %	73.2 %	43.1 %	67.2 %
14	96.2 %	90.8 %	91.5 %	91.5 %	92.3 %	83.1 %	89.2 %
15	99.2	98.5	98.5	63.4	96.2	60.3	71.0
16	100.0	92.1	99.0	89.1	54.5	64.4	28.7
17	100.0	100.0	100.0	86.6	99.4	61.0	100.0
18	100.0	60.9	85.1	81.0	89.1	0.0	86.8
19	99.0	96.0	99.0	3.0	76.8	14.1	89.9
20	88.4	88.4	88.4	88.4	88.4	87.8	87.1
21	100.0	82.5	0.0	51.7	96.5	76.2	0.0
22	100.0	98.2	98.2	98.2	0.0	28.2	52.7
23	18.4	0.0	12.2	0.0	0.0	0.0	0.0
24	89.1	83.9	79.6	75.9	1.5	0.0	2.9
25	82.0	81.4	82.0	80.7	81.4	71.4	78.3
26	94.4	86.3	47.0	9.4	11.5	0.4	40.2
27	98.0	98.0	98.0	98.0	98.0	90.2	48.0
28	94.2	88.4	0.6	84.3	84.9	59.3	86.0
29	98.7	98.7	98.7	98.7	98.7	0.6	99.4
30	99.1	99.1	99.1	98.2	99.1	18.4	95.6
31	97.0	96.2	97.0	53.4	94.0	35.3	95.5
32	100.0	87.7	100.0	37.7	67.0	70.8	18.9
33	96.8	94.9	97.4	14.1	95.5	44.9	96.2
34	97.9	92.6	87.4	80.0	88.4	0.0	86.3
35	100.0	100.0	100.0	100.0	100.0	87.0	100.0
36	95.5	90.4	94.2	94.2	92.3	2.6	88.5
37	95.7	94.8	94.8	93.9	94.8	81.7	85.2
38	100.0	100.0	100.0	2.0	71.1	36.8	54.6
39	98.3	89.1	0.0	85.1	92.6	25.7	37.1
40	93.4	84.0	94.3	20.8	32.1	52.8	75.5
41	96.0	35.3	94.0	58.7	2.7	42.0	12.7
42	100.0	76.9	100.0	88.5	55.8	63.5	29.8

Data Source: One-time service check-off for OEA/OSP

FIGURE 4-8

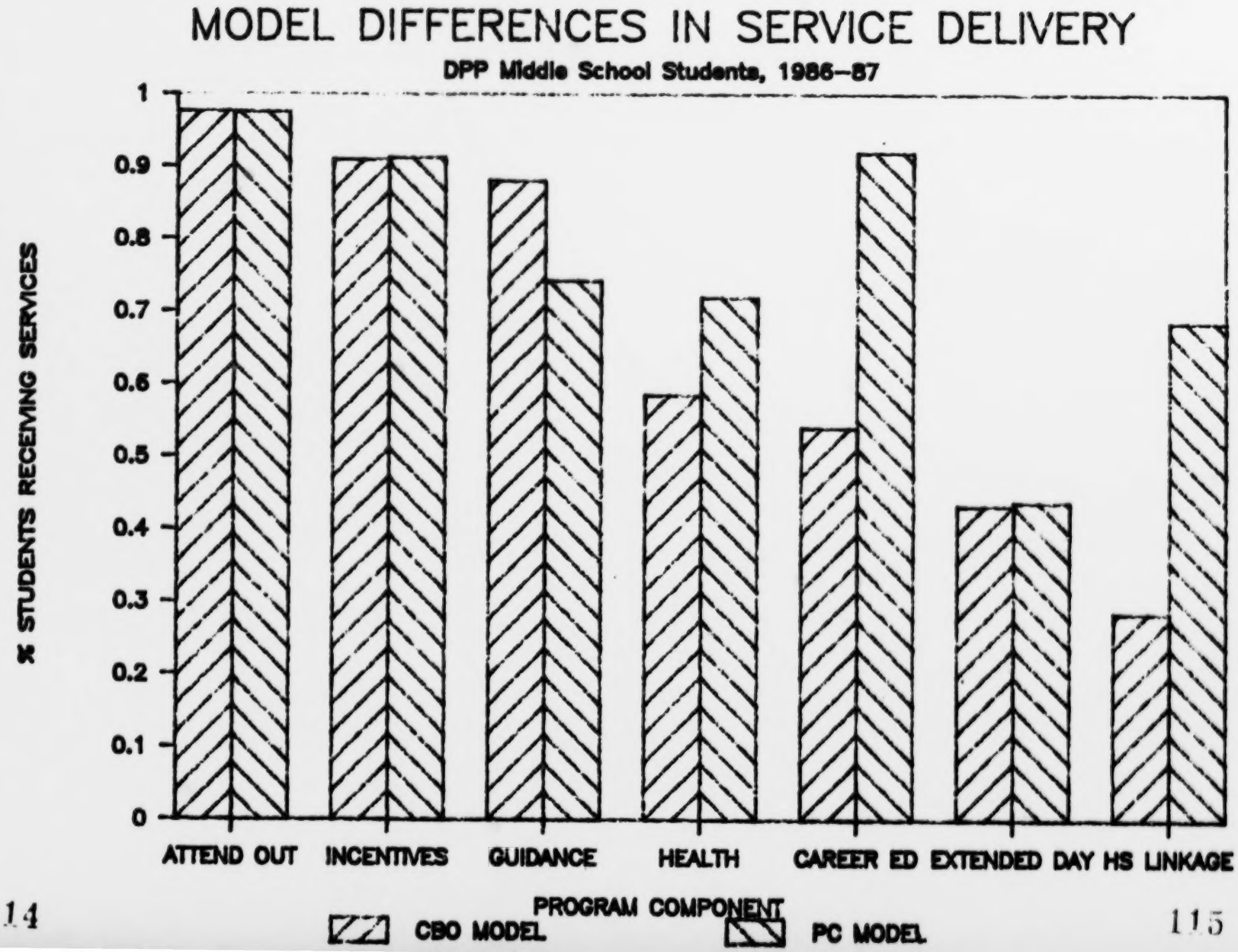
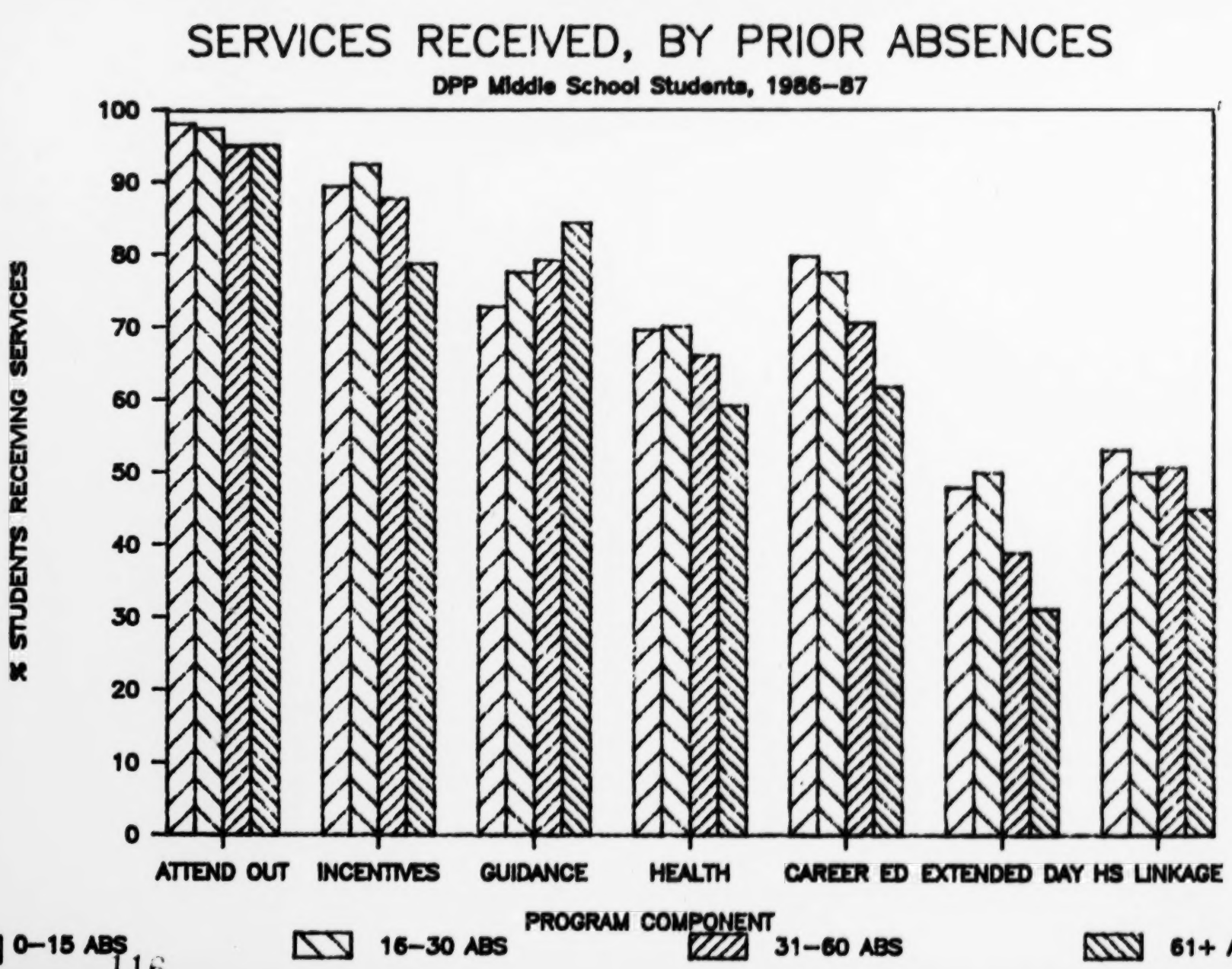

MODEL DIFFERENCES IN SERVICE DELIVERY
DPP Middle School Students, 1986–87
% STUDENTS RECEIVING SERVICES
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
ATTEND OUT
INCENTIVES
GUIDANCE
HEALTH
CAREER ED
EXTENDED DAY
HS LINKAGE
PROGRAM COMPONENT
CBO MODEL
PC MODEL

FIGURE 4-9


SERVICES RECEIVED, BY PRIOR ABSENCES
DPP Middle School Students, 1986–87
% STUDENTS RECEIVING SERVICES
100
90
80
70
60
50
40
30
20
10
0
ATTEND OUT
INCENTIVES
GUIDANCE
HEALTH
CAREER ED
EXTENDED DAY
HS LINKAGE
PROGRAM COMPONENT
0–15 ABS
16–30 ABS
31–60 ABS
61+ ABS

The patterns of service delivery are slightly different when prior risk is defined in terms of the number of prior subjects failed (see Figure 4-10). In this case, the only service for which there is a clear negative relation between level of risk and proportion of students served is extended day programs. In three other areas (guidance, health, and high school linkage), students who had failed 1-50% of their prior year courses received more services than students in either the low risk (0 failures) or high risk (50-100% failures) categories. The proportions of students in each risk category who received attendance outreach were nearly equal. Students in the highest risk group received fewer incentives than students in the other three categories, and fewer career education services than students with 0 or 30-50% failures.

The relationships between dropout prevention services and the two main outcome variables, attendance (i.e., proportion of days present) and proportion of subjects passed, were examined in two separate regression analyses. Student background information from the 1985-86 school year was entered into the regression equations, to control for pre-existing differences among students.

The first regression analysis examined the effect of dropout prevention services on 1986-87 attendance. Overall, after the initial differences in students' prior attendance rates were controlled, the dropout prevention services were found to explain 2.8% of the variance in 1986-87 attendance. As indicated in Table 4-8, which shows the regression coefficients of the different services, none of the individual dropout prevention services had a large positive relationship to 1986-87 attendance. All services but attendance outreach and health had small positive relations to student attendance. Performance incentives had the largest positive association with attendance (b=.051), while attendance outreach had a correspondingly large negative relation (b=-.072), and thus was the service least associated with increased attendance. That is, those students receiving attendance outreach services were more likely to attend school fewer days during the 1986-87 school year. This finding might indicate that attendance outreach services were directed to those targeted students accurately perceived to be at greatest risk of poor attendance. The relations between the other services and attendance are very small. High school linkage services had almost no relationship with attendance, while the extended school day, career education, and guidances services had small positive relationships with attendance and health services had a small negative relationship with attendance.

In a second regression analysis, the relationships between dropout prevention services received and the proportion of subjects passed by DPP students in 1986-87 were examined. The proportion of subjects passed in 1985-86 was used to control for initial differences among students. Overall, dropout prevention services accounted for 2.6% of the variance in proportion of subjects passed in 1986-87, after controlling for 1985-86 proportion of subjects passed (see Table 4-9). When the services

FIGURE 4-10

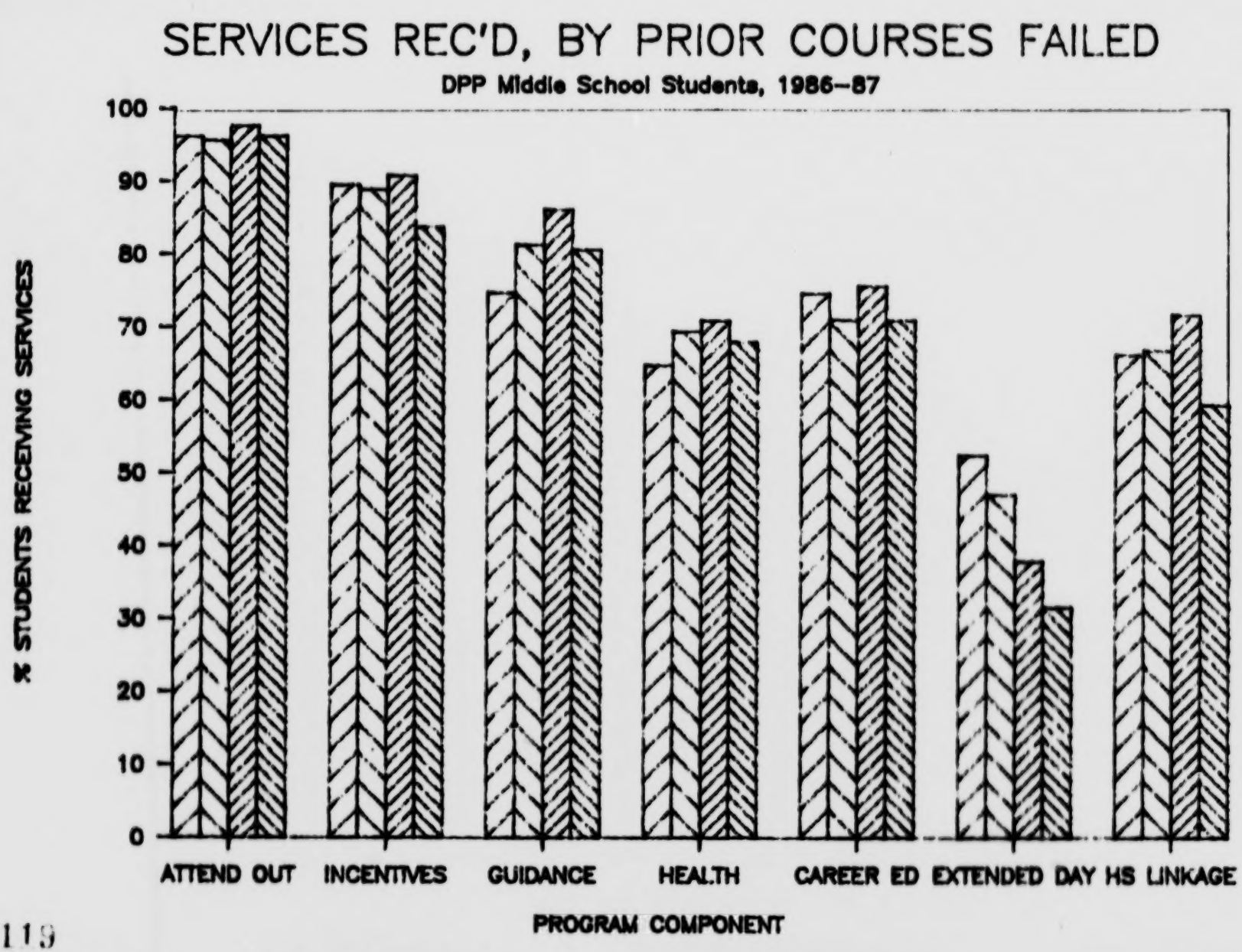

SERVICES REC'D, BY PRIOR COURSES FAILED
DPP Middle School Students, 1986-87
% STUDENTS RECEIVING SERVICES
100
90
80
70
60
50
40
30
20
10
0
ATTEND OUT
INCENTIVES
GUIDANCE
HEALTH
CAREER ED
EXTENDED DAY
HS LINKAGE
PROGRAM COMPONENT
FAILED 0
FAILED 1-29%
FAILED 30-50%
FAILED 51-100%

TABLE 4-8

Effects of Services on Attendance
DPP Middle School Students, 1986-87

Variable	b	Standard Error	beta	F	Sig F
Prior Year Attendance	.717	.022	.524	1075.889	.0000
Attendance Outreach	-.072	.018	-.076	15.075	.0001
Attendance Incentives	.051	.011	.092	20.545	.0000
Extended Day	.032	.006	.095	30.629	.0000
High School Linkage	.004	.007	.012	.371	.5426
Health Services	-.017	.006	-.047	7.052	.0146
Career Education	.024	.008	.063	10.119	.0015
Guidance Services	.018	.007	.044	5.973	.0146
(Constant)	.192	.023		71.945	.0000

Note: These figures are based on the regression analysis where the dependent variable is current year attendance, the independent variables are DPP services, and prior year attendance is entered as a control variable.

Data source: One-time service check-off by program staff for OEA/OSP.

TABLE 4-9

Effects of Services on Proportion of Courses Passed
DPP Middle School Students, 1986-87

Variable	b	Standard Error	beta	F	Sig F
Prior Year Courses Passed	.333	.017	.320	371.867	.0000
Attendance Outreach	-.089	.062	-.025	2.031	.1543
Attendance Incentives	.189	.025	.139	56.875	.0000
Extended Day	.022	.012	.031	3.186	.0744
High School Linkage	.031	.015	.040	4.377	.0365
Health Services	-.056	.014	-.071	16.948	.0000
Career Education	-.011	.016	.021	1.404	.2361
Guidance Services	.019	.016	.021	1.404	.2361
(Constant)	.394	.058		46.702	.0000

Note: These figures are from the regression analysis where the dependent variable is current year proportion of courses passed, the independent variables are DPP services, and prior year proportion of courses passed is entered as a control variable.

Data source: One-time service check-off by program staff for OEA/OSP.

are examined separately, the proportion of subjects passed is negatively related to attendance outreach (b=-.089) and health services (b=-.056). (The relationship between outreach and subjects passed is not significant, however, since it has very little variance because nearly all students were coded as having received outreach services.) The strongest positive relationship was found between proportion of subjects passed and receipt of performance incentives (b=.189).

Analyses using MSSR data. Chapter Three has summarized the service delivery information obtained from MSSR records in November, February, and May. In this section we discuss the relation between program outcomes and services as reported on the MSSRs. Since the MSSRs contain more detail about service provision, showing the frequency of service, we expected these analyses to reflect the relationship more accurately than the above analyses using the check-off document. A possible exception to this is the category of individual guidance services, the recording of which was found to be extremely different from one school to another.

The first regression analysis using MSSR data examined the effects of program services on student attendance (the dependent or outcome variable). The proportion of days present in the previous year (1985-86) was entered as an independent variable in order to control for initial differences in attendance among students. Previous attendance was found to explain 28.5% of the variance in student attendance in 1986-87. Services reported on the MSSR forms explained 12.3% of the variance after differences in students' prior attendance were controlled. Table 4-10 shows the regression coefficients for each category of service. Since the range for each service variable differs, standardized beta weights can be used to compare the relative strength of the relation between each service and the attendance outcome, net of prior attendance. Three services are negatively related to adjusted 1986-87 attendance: communications, home visits, and contact with parents (beta = -.25, -.15, and -.05, respectively). The b coefficients show the direct relation of services to outcome. For example, a decline of about 1.8% in attendance (adjusted for prior attendance) is associated with each home visit, about a .6% decline with one unit of communication (mail, telephone, or autodialer), and a .7% decline with one meeting with parents. There is a .9% decline in adjusted attendance per health visit; however, because of its skewed distribution and small variance explained, the relationship of this variable with attendance is not significant.

The DPP services which are positively related to adjusted attendance include high school linkage, group guidance, extended day, individual guidance, and student conferences. Only the relations of group guidance (beta=.07) and extended school day services (beta=.12) to attendance adjusted for prior attendance reach the level of statistical significance; they are stronger than the relations of high school linkage (beta=.007), individual guidance (beta=.001), and student conferences (beta=.002). An increase in adjusted attendance of about .2% is associated with

TABLE 4-10

Effects of Services on Attendance
DPP Middle School Students, 1986-87

DPP Service*	b Coefficient^	beta^^	F	p
Communication	-.006	-.254	238.652	.0000
Health	-.009	-.028	3.262	.071
Parent Contact	-.008	-.052	9.260	.002
Home Visits	-.018	-.052	9.260	.002
HS Linkage	.007	.041	6.248	.013
Group Guidance	.005	.073	18.206	.0000
Student Conference	.002	.034	4.378	.037
Extended Day	.004	.116	44.356	.0000
Individual Guidance	.001	.047	5.435	.02

* Data on services were obtained from the Monthly Summary of Service Reports (MSSRs)

^ b Coefficients are regression weights, with 1986-87 proportion of days present as the dependent variable and 1985-86 proportion of days present as a control variable

^^ beta values are standardized coefficients

one session of individual guidance; for one session of high school linkage there is a .7% increase in adjusted attendance, for one group guidance session there is a .5% adjusted attendance increase, and for one extended day session there is an increase of .4% in adjusted attendance (Table 4-10).

The second regression analysis with MSSR data used proportion of subjects passed as the outcome variable. When the prior year (1985-86) proportion of subjects passed is entered into the equation as a control variable, it explains only 11.6% of the variance in 1986-87 courses passed. MSSR services explain an additional 9.2% of the variance (after the initial differences in academic achievement are taken into account). Communication, home visits, and parent conferences are negatively related to subjects passed net of prior subjects passed, a finding similar to that for the attendance outcome described above. Here, home visits is the service most negatively related to adjusted subjects passed; one home visit is associated with a 3.8% decline in adjusted proportion of subjects passed (beta=.17). One unit of communication (phone, mail, autodialer) is associated with a .8% decline in adjusted subjects passed, and one linkage activity is associated with a .4% decline. While one unit of health services is associated with about a 1.9% decline in adjusted proportion of courses passed, once again, because of its skewed distribution and small variance explained, its relation to outcome is not significant. Parent contact is negatively related to proportion of subjects passed, but the relationship is very small; one meeting accounts for a decline of 1% in the proportion of subjects passed after prior performance is accounted for (Table 4-11).

The services positively related to proportion of subjects passed, after prior performance is controlled, are group guidance, extended day, and student conferences. For one unit of group guidance, there is an increase of almost 1.9% in adjusted subjects passed; for one extended day there is an increase of .7%, and for one unit of student conferences there is an increase of .5%. The relations of the remaining services, high school linkage and individual guidance to course performance, are not statistically significant.

When District 3 (in which the number of student conferences reported appears inflated) and District 14 (which did not have certified counselors) are dropped from the regression analysis, the relationships between individual guidance, group guidance, and student conferences and the two outcome variables (attendance and proportion of subjects passed) are very similar to the results when the two districts are included.

Some of the differences in the relations between various services and proportion of subjects passed might be accounted for by students' attendance in the evaluation year. It seems reasonable to hypothesize that the less students are present in school, the fewer subjects they pass, and also that those who have low attendance will receive more communications, home visits, and health services, while they receive fewer of the

TABLE 4-11

Effects of Services on Proportion of Courses Passed
DPP Middle School Students, 1986-87

DPP Service*	b Coefficient^	beta^^	F	p
Communication	-.008	-.150	74.267	.0000
Health	-.019	-.028	2.774	.096
Parent Contact	-.013	-.047	6.331	.012
Home Visits	-.038	-.169	82.506	.0000
HS Linkage	-.003	-.009	.246	.620
Group Guidance	.018	.120	43.625	.0000
Student Conference	.005	.051	9.150	.003
Extended Day	.007	.097	28.339	.0000
Individual Guidance	.0001	.014	.412	.521

* Data on services were obtained from the Monthly Summary of Service Reports (MSSRs)

^ b Coefficients are regression weights, with 1986-87 proportion of courses passed as the dependent variable and 1985-86 proportion of courses passed as a control variable

^^ beta values are standardized coefficients

services which require their presence in school, i.e., extended day and group guidance. In order to examine this possible relationship between current year attendance, services, and subjects passed, we used a regression analysis with proportion of subjects passed as the outcome variable and 1986-87 (current year) attendance as the control variable. The results show that attendance during the outcome year does indeed account for a large amount of the variance in subjects passed (28%). The MSSR services account for only 1% of the variance after 1986-87 attendance is taken into account, and the relationships of most services with subjects passed are not statistically significant in this analysis. As indicated by the values shown in Table 4-12, group guidance is the only service which does have a strong and statistically significant relationship with the proportion of subjects passed, once present attendance is controlled (beta=.091, $p<.0001$). One session of group guidance accounts for a 1.4% increase in the proportion of subjects passed.

Effect of group guidance on students at different levels of risk. A further focus of study is whether the DPP services made more of a difference for students at one level of risk than at another. We began by analyzing the effect of the interaction between prior year attendance and each MSSR service on outcome attendance. One strong interaction was found: after controlling for prior year attendance, the present year attendance of students with the highest levels of absence in the prior year was strongly affected by the number of group guidance sessions they had during the outcome year, while students with the lowest levels of previous absence were not affected by group guidance. For example, for all students who were present in school only 50% of the time in 1985-86, the attendance of those who received four group guidance sessions was 8% higher than for those who received no group guidance, while for students who were present in school 90% of the time the prior year, the difference in attendance between students who received no group guidance and those who received four sessions was only 1%. Despite the fact that these effects of group guidance are significant, they account for less variance than one wants to see for the effect of an interaction. The most apparent reason for this is that fewer than half of the students received even one group guidance session during the three months represented by the MSSRs.

This interaction effect applied to the attendance outcome, but did not hold for the outcome of courses passed. Defining risk again in terms of prior year attendance, group guidance contributed positively to the outcome of courses passed for both students at high and low risk levels.

Finally, we also examined whether the provider of service (school staff, CBO staff, or joint school and CBO -- depending on who filled out the MSSR forms) had any relationship to program outcomes. With attendance as the outcome variable, the relationship between provider of services and outcome was very weak, explaining only .2% of the variance above the portion explained by prior year attendance. Similarly, when proportion of subjects passed was the outcome variable, provider of services

TABLE 4-12

Effects of Services on Proportion of Courses Passed, Adjusted for Present-Year Attendance DPP Middle School Students, 1986-87

DPP Service*	b Coefficient^	beta^^	F	p
Communication	-.0001	-.016	.813	.367
Health	-.004	-.006	.133	.715
Parent Contact	-.006	-.021	1.437	.231
Home Visits	-.009	-.041	4.959	.026
HS Linkage	-.012	-.035	4.225	.040
Group Guidance	.014	.091	26.485	.0000
Student Conference	.004	.034	4.297	.038
Extended Day	.002	.027	2.277	.131
Individual Guidance	-.0021	-.029	1.959	.162

* Data on services were obtained from the Monthly Summary of Service Reports (MSSRs)

^ b Coefficients are regression weights, with 1986-87 proportion of courses passed as the dependent variable and 1986-87 attendance (proportion of days present) as a control variable

^^ beta values are standardized coefficients

explained only .1% of the variance net of prior subjects passed.

Comparison Group

These outcomes for the second year of the Dropout Prevention Initiative should be examined in terms of what might have been expected of targeted students in the absence of any special interventions. It is generally supposed that at-risk students' attendance drops with each succeeding year. If that is indeed so, then a net loss of attendance for targeted students may be interpreted as a positive program outcome, if the loss was less than expected.

We constructed a comparison group of middle school students by taking all students in the 29 middle schools who met the primary attendance eligibility criterion (30-74 prior year absences) but who were not enrolled in the Dropout Prevention Program. There were 824 such students, ranging from 95 students in School 24, to 4 students in School 21. Course performance data were not available for comparison group students, so the only outcome on which comparisons could be made was attendance. Full attendance figures for 1985-86 and 1986-87 were available for 790 of the 824 students.

The average prior year attendance for the 790 comparison students was 67.4%, 11.1% lower than the prior year average of 78.0% for the targeted students. Thus, the comparison group was somewhat more at risk, at least in terms of attendance pattern, than the targeted students. This comparison group had an average attendance loss from 1985-86 to 1986-87 of 2.4%, resulting in an average 1986-87 attendance rate of 65.0%; this loss was .8% more than the average loss of 1.6% for targeted students. The change for the control group, then, was very similar to the change for the DPP targeted students.

Conclusion

This chapter has reported middle school outcomes for Year Two of the Dropout Prevention Program and has examined the relations between student characteristics, services, and outcomes. The very modest outcomes fall far short of what is needed in order to improve students' chances of completing a high school education. However, there are indications that the program can help some types of students, and that the programs at selected school sites are having positive effects. This last point will be addressed in the discussion of exceptional schools in Chapter Six. Work on measuring the effectiveness of the program for different kinds of students is continuing, as we particularly examine the interactions between services and student characteristics such as test scores or age, and as we relate background information from the student survey to outcome data.

Chapter Five

1986-87 Survey of DPP Middle School Students
Analysis of Student Responses

Introduction and Description of Survey Procedures

As part of the Year Two program evaluation, we conducted a survey of targeted middle school students in the Dropout Prevention Program in the spring of 1987. Our intent was to solicit students' responses on a variety of questions about their background characteristics, their attitudes toward school, their educational and career aspirations, and their experiences in school, particularly with the Dropout Prevention Program.

The original survey design called for surveying all targeted students in each of the 29 DPP middle schools. Conditions under which the survey was administered varied greatly among schools. In schools with blocked classes as part of their program, entire classes were brought to a cafeteria, library, gymnasium, or extra classroom to take the survey. In other cases, individual students were given passes the day before or the morning of the survey administration and were told to be in a certain room at a certain time. The survey was administered by staff of the evaluation project. Some school personnel left the Teachers College staff and their assistants alone in the room for the duration of the survey; others insisted on being present. Among those who remained present, some did not interrupt the process while others interjected occasional explanations, thoughts, or requests.

The survey was read aloud in all middle school administrations so that those reading below grade level would understand the questions and have an opportunity to respond. In addition, we provided Spanish language surveys for those students who preferred them, and Spanish-speaking staff administered these. Very few students chose to fill out the Spanish language version of the survey in preference to the English language version. At the beginning of each administration, all students were told that the surveys were confidential, and no one in the school would ever know any of their individual responses. In addition, students were periodically reminded that if they came across a question which they found uncomfortable to answer, they did not have to do so. This was particularly important for some of the more personal questions. In our informal discussions with students after the survey administrations, most reported having no difficulty with the questions asked.

While we originally planned for one day per school to administer the survey, expecting to reach most of the students in that day, for many schools we had to return several times to obtain adequate response rates. As conditions varied among schools, so did they vary from day to day within any given

school. Factors such as scheduling conflicts, tests, short notice, and space availability posed obstacles to the survey administrations. The number of students we were able to survey depended largely on the degree of assistance received from school and DPP staff in the planning stage of the survey as well as the individual schools' follow-up between the initial planning meeting and the actual day of the administration.

Characteristics of the Survey Sample

Completed or partially completed surveys were obtained from 1994 middle school students. Of these, we sucessfully matched 1718 to the student data tape provided by OEA, which contains 3922 students. Failure to match might be due to blank or invalid OSIS numbers on the student survey answer sheets, or to some non-targeted students having inadvertently completed the survey. Overall, we have survey responses from 44% of the total middle school target population.

The sample of survey respondents differs in important ways from the middle school target population as a whole. The survey respondents had better prior attendance and course performance, as well as better attendance and course performance during the program year, than students who did not complete the survey. The survey respondents were also more likely to be reported by school staff as recipients of program services than nonrespondents. In other words, according to school personnel, survey respondents received more program services than nonrespondents.

It is not surprising that survey respondents have better attendance than nonrespondents. The fact that a completed survey was obtained from a student means that he or she was present in school on the scheduled survey day or follow-up days. Students with worse attendance were less likely to have been in school on those days. But this difference has serious implications for the interpretation of survey results. Because the survey respondents are both better attenders, and more likely to have received program services, than nonrespondents, their answers may not generalize to the entire middle school target population. Instead, the survey results apply best to the types of students who responded to the survey: those who are performing better in school and attending school more often, and those who were more likely to be served by the program. We caution, therefore, that the survey responses may paint a too optimistic picture of the backgrounds, attitudes, and experiences of the middle school target population. Students' reports of the program services they received in the 1986-87 school year are likely to imply a greater volume of service delivery than would have been reported by the target population as a whole. Students' attitudes toward school also are likely to be more positive than if the entire population had completed the survey. This bias needs to be kept in mind throughout the discussion of survey results which follows.

Student Characteristics

The Year Two middle school survey provided a rich array of information about the characteristics of responding targeted middle school students. The middle school target population is composed primarily of non-white racial/ethnic groups. Nearly half (46%) of the responding students report that they are Hispanic or Spanish. About one-third (32%) say they are black or Afro-American, and an additional 8% describe themselves as Asian-American or Pacific Islanders. Only 4% of the respondents described themselves as white, while 9% selected "other". Hispanic and black youngsters thus make up more than three-quarters of the middle school DPP population.

Since so many students describe themselves as Hispanic, it is not surprising that many students report speaking Spanish, especially at home. Forty percent of the respondents indicated that the adults in their home speak Spanish most of the time, and 28% said that they themselves speak Spanish most of the time at home. Many of these youth apparently would rather speak English, however. Only 20% of all respondents prefer speaking Spanish at home, and only 11% prefer speaking Spanish with their friends.

DPP middle school students have varied household configurations. The vast majority (89%) live with their mother, stepmother or female guardian; even so, that more than a tenth do not is high relative to national figures. As is common among poor, non-white populations in central cities, most (52%) of the responding students do not live with a father, stepfather, or male guardian. There frequently are other adults in the home, though, as 12% of the students report that an aunt lives with them, and 12% that an uncle lives in their home.

Grandparents also frequently are present, as 14% of the respondents report that a grandmother lives with them, and 10% that a grandfather lives with them. In addition, 22% indicate that an adult other than those already named lives in their homes.

Many of the students live with several other children in their households. One in five live with at least four other children in their home. An additional 16% report living with three other children, and another 21% with two other children in their households. One in six (16%) is the only child in the household, and 27% more are one of two children in the home. Well over half of the targeted students, then, live with at least two other children at nome.

We cannot accurately describe the economic conditions in the lives of DPP middle school students. Our findings are consistent, though with the notion that this is an economically disadvantaged population. One indicator of this is the size of the household, especially the number of children. We have seen that DPP middle school students responding to the survey report

that they live in large families, which typically are more impoverished because the number of wage earners does not rise as family size does. In addition, the respondents' parents tend to have limited formal schooling. Many students did not know how far their mothers or fathers went through school (28% and 42% of all respondents, respectively). Among those who did respond, 38% indicated that their father, stepfather, or male guardian had not completed high school, and 42% reported that their mother, stepmother, or female guardian did not complete high school.

A possible consequence of the limited schooling obtained by the parents of at-risk youth is that these parents have limited experience with the school system. Because many of them did not complete high school, they may not understand what their children must do in order to complete high school successfully. Such parents may not be able to help their children with their schoolwork, nor to offer them informed advice about educational decisions. They may not have the same commitment to schooling that parents with more schooling convey to their children. The children of parents with limited schooling are especially dependent on the school for the support and educational resources needed to succeed in school.

We also looked at an additional unobtrusive measure of family economic standing. We asked students how their family receives telephone calls. While virtually everyone takes having a telephone for granted, for families in severe economic need a telephone may be a luxury. Only 77% of the respondents reported that their family has its own telephone. An additional 13% use a neighbor or friend's telephone, while 10% claim that they cannot be reached by telephone. Nearly a quarter, then, do not have a telephone in their homes.

In addition to the extent to which not having a telephone might indicate economic need, lacking a phone has obvious implications for attendance outreach purposes. A large number of targeted middle school students apparently are not reachable by telephone-based attendance outreach services, especially TELSOL machines. And, since family economic well-being contributes to whether a student is "at-risk" or not, it may be that the most at-risk students are the least accessible. Other outreach strategies, such as home visits, may be more appropriate than phone-based techniques for significant portions of the target population.

We mention several of these aspects of students' social backgrounds and family economic well-being because they are frequently regarded as educational risk factors. Household configuration and family socioeconomic background in particular consistently are related to educational achievement, even when other factors are taken into account. Different household configurations and family characteristics present different resources for children to draw on as they strive to succeed in school. Clearly, many youth in the middle school target population lack some of these desirable resources. But it also

is the case that there is substantial diversity in children's access to valued home resources. For example, while about one-half of the respondents do not live with a father, stepfather, or male guardian, the other half do so. Under these circumstances, it is unwise to generalize too broadly about the characteristics of the target population, as doing so masks considerable heterogeneity among individuals.

Although the middle school target population is composed mainly of seventh and eighth graders, many of these youth have begun activities associated with older adolescence and adulthood. Twenty percent of the respondents reported that they were 12 years old or younger when they first worked for pay (not counting work around the house), and a total of 58% began working for pay at age 14 or younger. More than one-quarter (28%) had worked for pay during the 1986-87 school year by the time of the survey administration in late spring, while another 25% had worked for pay during the summer before the school year. Among those who reported working for pay, one-quarter were working 21 hours or more per week at their current or most recent job. Almost eleven percent were working 31 hours per week or more. For some of these students, the most recent job was not during the school year, but for others, working is an activity competing with, and perhaps winning over, school and homework for students' time. For some students, apparently, work is a must and school is a lower priority, in spite of compulsory schooling laws.

The target population also is rapidly approaching adult family roles. Five percent of the respondents claim that they have already had their first child. Nearly one-half (47%) of those asked, and choosing to respond, report that they have had sexual intercourse (1). Almost one-half (45%) say that there is a particular person that they go out with regularly, are going steady with, or are engaged or married to. More than one-half (52%) indicate that they go out with a boyfriend or girlfriend at least once a week, and more than one-quarter (26%) do so every day or almost every day.

These data suggest that there is a lack of synchronization in the lives of targeted middle school students. Educationally, these youth are still socially defined as children. Junior high schools and middle schools are "intermediate" schools, in that society views them as way stations en route to a destination, completing high school. But in the work sphere, many of these youth are already engaging in adult activities. A sizeable number are working for pay, and have been for some time; many also have been working a high number of hours. And in the family sphere, large numbers of these youngsters are involved in long-term, intense dating relationships, frequently are sexually active, and may already be parents.

Targeted middle school students hold very high educational expectations for themselves. Forty-three percent of the respondents think that they will finish college or obtain even more schooling than that. An additional 22% anticipate attending

a vocational, trade, or business school after high school, or attending but not finishing college. Only 6% of the respondents expect not to graduate from high school. Most (49%) of the respondents want to go to some kind of postsecondary school in the year after they leave high school. Smaller proportions hope to get a job or join the armed forces (19% and 16%, respectively). The remainder wanted to do something else or didn't know what they wanted to do most. It is surprising that these targeted youth hold such high expectations for themselves in light of the educational trajectories of their parents, siblings, and peers. While holding high expectations is part of the effective schools model, and therefore is seen as desirable, the expectations of these students are so high that eventually there is likely to be a sharp clash between these expectations and the probable educational attainments of these students. Further research is needed to understand why targeted students have such high expectations, and how schools can use these expectations to promote children's school careers.

School Environment

Targeted students describe their schools as the locus of a considerable amount of violence. A majority report seeing a student hit or attack another student almost every week, and two-thirds report seeing this about once a month. Almost one-half (45%) claim to have seen a student physically threaten a teacher at least once a month, and 29% report seeing a student threaten a teacher almost every week. Almost one-half (48%) also have seen a student hit or attack a teacher at least once during the school year, but only 18% report that this is as frequent as once a month. Conversely, more than half (55%) have seen an adult at the school physically threaten a student at least once during the school year, and about one-quarter (26%) report seeing this at least once a month. Additionally, 60% of the respondents report having had to fight to protect themselves at school at least once during the year, and 11% claim that they fight to protect themselves almost every week.

In spite of students' reports of violent activity in the schools, the respondents for the most part are not afraid of personal involvement. Most (72%) say that they are never or almost never afraid that someone will hurt or bother them at school. Only 10% report that they are afraid of being hurt or bothered most of the time. Responding students gave almost identical answers when the question was posed about what happens on the way to or from school. Here, too, 72% claim that they are never or almost never afraid that someone will hurt or bother them on the way to or from school, and 9% are afraid of this most of the time (2).

Not surprisingly, the violent activity reported by targeted students carries over into the classroom, and the responding students did describe a considerable amount of classroom disruption. About one-quarter (24%) claim that there is almost

always so much noise in the hall that they can't keep their minds or class, and a like proportion say that there is almost always so much noise in class that their teachers can't teach. Only about one quarter say that there is almost never a disruptive amount of noise in the hall or classroom.

Some targeted students feel that their teachers respect and care about them, while others believe that their teachers treat them poorly. About one-fourth say that their teachers almost always treat students with respect; care about the students; and really listen to what students have to say. About one-fifth (19%) claim that teachers almost never do things that make students feel put down.

Similar numbers, though, report a different view of their teachers. About one-quarter of the responding students indicate that their teachers almost never treat students with respect; almost never really listen to what they have to say; and almost never care about the students. Also, about one-fourth of the respondents say that their teachers almost always do things that make students feel put down. We have not yet attempted to test possible explanations for the variations in students' reports of the ways teachers regard them.

Targeted students also report that their teachers do not have very low expectations for the students' academic performance. Only 6% say that their teachers nearly always think that they are slow learners. An additional 8% claim that this is true a lot of the time. 56% report that their teachers almost never think that they are slow learners, and 30% say that their teachers think they are slow learners not much of the time. From the students' perspective, then, the teachers of targeted students hold challenging standards for performance for the students to meet.

Due to survey constraints, we did not ask many questions about students' views of their school principals. We do know that students like their principals less than they report liking their school, their teachers, their classes, or their fellow students. About one-third (34%) say that they don't like their principal at all. About one-quarter (24%) say that they like their principal very much, and 41% like the principal fairly much. Students also report that their principals get out of the office and talk to students at least some of the time. Nineteen percent indicate that the principal is almost always out of the office talking to students, and 45% that the principal does this sometimes. Slightly more than one-third (36%) say that their principal almost never gets out of the office and talks with the students.

Students' Reports of DPP Services

We asked students about their experiences with a variety of DPP program components, including attendance incentives, health

services, guidance and counseling, extended day programs, career education, and tutoring. We also asked students to report what the school did when they were absent. We could not distinguish activities that were specifically DPP-originated and funded from other school activities and programs. For example, students might have gone on other school trips than DPP-sponsored trips.

Many students received attendance incentives. More than a third (35%) reported getting an award like a certificate for improving their attendance, and nearly a quarter (23%) got a prize like a t-shirt or a calculator for improving their attendance. Two-thirds (66%) reported going on a school trip. We also asked students who reported receiving an attendance incentive how it made them feel. Of these, 42% said it made them feel very happy, and an additional 42% said it was "kind of nice."

Most targeted students are receiving some form of health care. We asked students how often since the beginning of the year they had been to a health clinic, either at school or in the neighborhood. 85% had been to a clinic at least once, and 45% had been to a health clinic at least once a month. Health counseling at the school was less common. Only 41% of the responding students had talked with a teacher, counselor, or other adult in the school about their health problems or needs, and only 16% had done this as frequently as once a month.

School guidance and counseling were more prevalent than health counseling, although large numbers of students reported no individual or group counseling. We asked students how often they had talked one-on-one with a teacher, counselor or other adult in the school about problems at school or at home. We also asked them how often they had met in a group with other students to talk about problems at school or at home. Nearly half (44%) of the respondents reported that they had not talked about problems one-on-one with an adult in the school during the school year. About one-quarter (24%) did so about once a month, though, and 12% reported individual guidance and counseling almost every week. Some students apparently were getting a great deal of individualized counseling, while others were getting none. In other words, there was considerable inequality among students in the distribution of individual guidance and counseling services.

The story is the same for group counseling, although there appears to be more inequality in receipt of group counseling services than in individual counseling services. As with individual guidance and counseling, 12% report sessions almost every week. But three-fifths of the respondents report no group counseling, a substantially higher number than those reporting no individual counseling.

Many targeted students report participating in extended-day programs at the school operating before or after school hours. More than half (57%) went to such a program at least once during the 1986-87 school year. One student in four reported going to

an extended day program almost every week.

Although activities designed to promote linkages between middle school and high schools and are an important component of the DPP model, students report only sporadic linkage activities. Most (71%) responding students report listening to students or adults from a high school talk about what the high school is like. But a much smaller proportion reported direct contact with a high school. Only 37% claim to have gone with a class to visit a high school. Even smaller fractions report having gone to a special event at a high school (31%), or having gone to a special event at a high school (24%). This pattern suggest that linkage services are not reaching most targeted students. Moreover, while these items do not address the frequency of trips to a high school, it is probable that even a smaller proportion than cited above is getting a sufficient volume of linkage services to make a difference in their school careers.

Relatively few students reported working with a tutor on their schoolwork. Three-quarters claimed not to have done this at all during the school year. Only 14% reported being tutored as frequently as once a month, and only 8% said they were working with a tutor almost every week. Evidently, academic tutoring is not seen as an important instructional strategy for this population of low-achieving students.

The one program component most linked to instruction is career education. Unlike with academic tutoring, most targeted middle school students report some exposure to career education. Just over three-quarters (76%) reported learning about different kinds of jobs or careers at least once during the school year. More than two-fifths (42%) learned about different careers at least once a month. Also, more than one quarter (27%) said that they learned about different kinds of jobs or careers almost every week.

The student reports do not square particularly well with other information about the middle school DPP program. For instance, most middle school programs have weekly career education classes. In light of this, it is surprising that so few students report high levels of career education. One interpretation is that the at-risk students simply do not perceive this activity as career education, perhaps because the class time is used for other activities.

Some career education programs involve students in groups learning how to run a business. Smaller numbers of targeted students report participating in this kind of program. Only 40% of the responding students indicated any contact with a group learning how to run a business. Of these, however, relatively few worked regularly with a group. Only 21% of the respondents worked with a group learning how to run a business as often as once a month, and only 13% did so almost every week. For the vast majority of students, then, the level of involvement in this career education activity was probably too low to have much of an

impact.

As we noted earlier, although these respondents were enrolled in intermediate and junior high schools in 1986-87, many had already begun working for pay. We asked students whether someone working in or with the school helped them find a job. One-third of the respondents said they had received this kind of help in finding a job. For most (61%) of these students, the job was in their neighborhood. But many (39%) students indicated that the job they found with the help of the school was outside of their neighborhood.

Student Absence and the School's Response

As is outlined elsewhere in this report, DPP middle school students were selected for the program in large part because of their poor attendance histories. Most of these students continued to miss many days of school during the program year. We asked students to identify the number of days of school they were absent due to various causes. Due to the limitations of the survey design, we were unable to ask students the precise number of days they were absent since September for each reason. Instead, for each reason, students responded "never," "1 to 10 days," or "more than 10 days" (3).

With one exception, very few respondents reported missing more than 10 days of school for a single reason. That one exception is student illness. More than a quarter (28%) of the respondents reported missing more than 10 days of school because they were sick. An additional 53% said they had missed from 1 to 10 days of school due to illness. Thus, more than four-fifths of the respondents missed at least one day of school because they were sick. Student illness was by far the most cited reason for student absence from school.

The next most common reason for absence was because students "just didn't feel like going." More than two-fifths (41%) of the respondents gave this as a reason for being absent. For 8%, this reason accounted for more than 10 absences. The next most cited reason concerns having to take care of someone at home. 36% of the respondents missed at least one day of school for this reason; 5% said they were absent more than 10 days because they had to take care of someone at home. A similar number reported being absent because they had problems at home. One-third of the responding students missed at least one day for this reason, and 5% were absent more than 10 days because they had problems at home.

For the other six reasons we presented to the respondents, only 3% to 4% indicated that they were absent more than 10 days for any one of those reasons. We therefore focus on the numbers of targeted students reporting that they missed at least one day of school during the 1986-87 school year for each reason. More than a quarter (26%) had at least one absence because they wanted

to do something with friends. A fifth missed at least one day because they had problems with a teacher or other adult at the school. A fraction fewer (19%) were absent at least once because they had problems with another student or group of students. The same number missed at least one day due to suspension from school.

The two remaining reasons were endorsed by even fewer responding students. One in seven respondents said they were absent at least once because their family moved away for a while. Also, one in nine students reported missing school because they had to work. While these two reasons are part of the conventional wisdom in accounting for student absences in New York City middle and high schools, they do not figure prominently in students' own explanations for why they were absent from school.

We asked students what the school did when they were absent from school many days during the 1986-87 school year. There are circumstances, though, when students might not know what steps the school took. Some students presumably were not absent much during the 1986-87 school year, in which case the question did not apply. For this reason, we included a "don't know" response option to questions about specific school reactions to students' prolonged absence.

Students reported that the most common response to continued absence was the school sending a letter to their home. Two-thirds of the respondents said that when they are absent a lot of days, the school sends a letter to their home. 23% said that the school does not send a letter home in these circumstances, and 10% claimed not to know.

While sending a letter home is the most commonly reported school response to prolonged student absence, a letter is less likely to carry the weight of a parent conference at the school or a visit to the home by someone from the school. These latter strategies are more likely to stress to the student and his or her family the importance of attending school, and how much the school and its staff want the student to attend. These strategies also both involve direct communication between home and school, thereby helping the school to understand why students have not been attending regularly, and perhaps to develop a more effective organizational response.

Students report that the strategies of home visits and parent-school conferences are used much less frequently by the DPP middle schools than the strategy of sending a letter home. Of the responding students, 44% said that when they had been absent a lot of days in the 1986-87 school year, their parent or guardian is asked to come to the school. 42% replied that there was no such request, and 14% said they didn't know. A smaller number of responding students said that someone from the school visits their home when they were absent a lot of days during the 1986-87 school year. Only 40% reported home visits under these

circumstances; 46% declared that there were no visits to their home when they were absent a lot of days, and 13% said they didn't know.

Of course, it is possible that schools might use either home visits or parent-school conferences as a primary strategy, so that the proportion of students reporting home visits and parent-school conferences separately might be misleading. A different question is after a prolonged absence from school, what proportion of DPP middle school students report neither a home visit nor a parent-school conference? A large number of students (42%) report neither. Apparently many at-risk students are exposed to neither of the most vigorous attendance outreach and retrieval strategies.

We also asked students to report on what happened at school after their most recent absence. The responses suggest that the school's organizational response to a single absence by "at-risk" middle school DPP students is relatively weak, especially when compared to the school's response to prolonged periods of absence. For instance, only 37% of the respondents said that the school called their home after the most recent absence, and 40% said that the school sent a letter to their home after their most recent absence during the 1986-87 school year. About 10% said they didn't know if the school did these things.

An even smaller number (23%) said that their most recent absence prompted a home visit by someone from the school. Two-thirds of the respondents claimed that their most recent absence did not produce a home visit by the school; 9% said they do not know if someone from the school visited their home after the last day they were absent from school.

About three-fifths (61%) of the responding students reported that after their most recent 1986-87 absence, a teacher, counselor or other adult in the school asked them where they had been. One-third said this did not occur, and 5% didn't know. This was by far the most common response of the set that we presented to the survey respondents. Many targeted students perceived little visible interest in their absences on the part of school staff. Even asking a student where he or she had been reinforces the impression that the school cares about the targeted student and wants him or her to attend school. The lack of such personal contact can only reinforce the converse.

There was little evidence of negative sanctions by teachers following targeted students' most recent absence. We asked students if, when they came back to school, a teacher was mad at them or put them down in class. Only 13% reported this kind of reaction from their teachers. Four-fifths indicated that this did not happen after their most recent absence, and 7% didn't know. Overall, the school's response to the most recent absence can thus be characterized as a mixture of mild concern and apathy, with just a dash of insult.

One of the consequences of prolonged student absence is that students are not exposed to the entire curriculum, and miss out both on instruction and assessment. This is particularly problematic when the curriculum is sequential, so that failure to master earlier tasks and ideas precludes mastering more advanced skills. We asked students how they caught up on missed work when returning to school after a long period of absence. Most students reported that they received help in catching up. 30% said that the teachers helps them catch up on work they missed. An additional 35% reported that another student helps them catch up on work they missed, and 9% indicated that someone else helps them catch up. 7% claimed that they don't need to catch up on any work, and 20% said that when they are absent from classes a long time, they just call behind.

Most students report that their class time is rarely occupied with working on subjects that they are behind in. About two-thirds (65%) of the respondents say that the amount of their class time spent working on subjects that they are behind in is "almost never" or "not much". Only 15% say that they nearly always work on subjects that they are behind in.(4)

We also asked students about how frequently they were late to school or cut a class at school. Most students are at least one period late to school on a regular basis. About one student in six reported being at least one period late almost every day they go to school. An additional 21% claimed being late to school about once a week. 20% more said they came late to school about once or twice a month. Only one student in five reported no latenesses of at least a period in length in the 1986-87 school year.

Students report cutting class less frequently than being late to school. On days when students are at the school, only 6% report cutting one or more classes almost every day they go to school. An additional 13% claim that they cut classes about once a week, and 14% more say they cut one or more classes once or twice a month. But one half of the responding students say that they never cut classes on days when they are at the school.

Student Attitudes toward School

There is a great deal of variability in students' reports of how much they like school. Crudely put, most questions show a clumping of about one half of the responses in the middle, with about a quarter reporting positive attitudes and the remaining quarter reporting negative attitudes. Of course, the precise proportions vary from one question to the next. But the responses of individual students are fairly consistent from one attitude question to the next.

Responding middle school students claim, on average, to like their classes. One-third (34%) said that they liked going to all of their 1986-87 classes, and 39% like going to most of their

classes. Only 3% reported liking no classes, and but 9% more liked going to just one or two classes. About one-half (49%) report that they enjoy the work they do in class nearly always or a lot, and only 7% say they almost never enjoy the work they do in class. Most see classwork as valuable at least some of the time. Relatively few respondents said that work in class is just busy work and a waste of time. Only 18% claimed that this was true nearly always or a lot of the time.

Most students also report liking the school. One-fifth say they like the school very much, three-fifths (60%) say they like the school fairly much, and the remaining fifth like their school not at all. We also asked students how close they felt to the school -- whether the school and the respondent were like "good friends", "friends", "distant relatives", "strangers", or "enemies". Most students expressed a positive sentiment toward the school. 18% said the school is like a good friend, and 37% said the school is like a friend. One-fifth (20%) reported that the school is like a distant relative, and 11% said the school and they are like strangers. 14% claimed the school and the student are like enemies.

In spite of these generally positive (or at least neutral) sentiments, a majority (56%) of targeted DPP middle school students report that most of the time they do not want to go to school. Perhaps students like the <u>idea</u> of going to school, but shy away when they don't do well. We asked students how much of the time they were very happy when they were in school. Only about a fifth (21%) replied "nearly always", and another fifth (20%) said "a lot". In contrast, 40% said they were very happy when in school not much of the time, and 18% said they were almost never very happy in school. Too, 40% claim they often feel unsuccessful in school, and 57% say that no matter how hard they try, they never get the grades they deserve.

There is no evidence of inherent animosity toward the school on the part of DPP middle school students. But it is also clear that many students don't like going to school. The most plausible interpretation of this puzzling phenomenon is that these students avoid school to avoid unpleasant experiences of failure in school. If this is so, a sensible strategy is to structure the school experiences of these youth to alter their steady diet of failure. While recreational clubs and extended day programs are a step in the right direction, the classroom is a more appropriate locus of change, since that is where students spend most of their school day.

NOTES TO CHAPTER FIVE

1. This question is obviously quite sensitive, and we made special efforts to inform students that they did not have to respond to it if they so chose.

2. No doubt part of the incongruity between students' reports of violence and their reported personal fear of violence can be attributed to adolescents' unwillingness to admit fear, even on a confidential survey.

3. We frankly are unsure how valid students' reports of their number of absences are. There is some evidence that students' self-reports of absences understate the numbers reported by their schools.

4. Different students may have different notions of what it means to be behind in a subject. Virtually all students are behind grade level, but it is more likely that students are using some other relative standard to judge being behind.

Chapter Six

ANALYSIS OF MIDDLE SCHOOLS WITH EXCEPTIONALLY HIGH OR LOW ATTENDANCE AND COURSES PASSED IN 1986-87

While overall the Dropout Prevention Program did not make a substantial difference to the targeted students' attendance and courses passed in Year Two, the average outcomes for the 29 schools varied quite a lot. The average attendance change in the schools ranked highest and lowest on attendance differed by 11.2%, or the equivalent of 20 days per student. The difference between the schools that ranked highest and lowest on proportion of courses passed was very large, 50.4%, meaning that targeted students in the high outcome school (School 29) passed on average two and a half more courses for every five courses taken than did targeted students in the low outcome school (School 37).

What accounts for differences like these? Were these schools particularly diligent in implementing the Dropout Prevention Program according to expectations? Did characteristics of the schools account for differences in addition to the DPP itself? Was there something about the sample of students for whom complete outcome data were available that might explain the differences between the schools? Using the b weights from the regression analysis, we have identified four sets of schools: the four with the highest positive effects on attendance change (Schools 16, 17, 19, and 38), the four with the highest effects for courses passed (Schools 14, 19 again, 26, and 29), the four schools with the least positive effect on attendance change (Schools 18, 24, 34, and 42), and the five with the least positive effect on courses passed (Schools 18 again, 24 again, 25, 28, and 37). We will call these 14 schools the "exceptional" schools and will refer to the schools with strongest and weakest b weights as the "gain" and the "loss" schools respectively.

The schools that are identified as the gain and loss schools through this procedure are not necessarily those that show the largest unadjusted gain or loss in attendance or courses passed. Thus it is Figures 4-1 and 4-2, rather than Tables 4-1 and 4-3, from which we have identified the exceptional schools. A t-test of the difference between the b weights of the school which ranked lowest of the four attendance gain schools and the school that ranked highest of the four attendance loss schools (schools 38 and 42 respectively) was significant at the .05 level; thus all of the gain schools are significantly different from all of the loss schools, and vice versa, at the .05 level of confidence or better. A similar t-test for the difference between the b weights of the courses-passed gain and loss schools whose b weights were closest to each other (schools 26 and 28) was significant at the .001 level, meaning that all of the gain schools were significantly different from all of the loss schools at the .001 level or better.

Our most general conclusion from the analysis that follows is that the explanations for the relative gains or losses of the schools are very situation-specific. All of the factors suggested above come into play in one combination or another in the different schools, but the schools have to be understood on a one-to-one basis. Ultimately, the staff of the schools themselves, including the school and CBO staff of the Dropout Prevention Program, are the ones in the best position to interpret the data and determine what is influencing the outcomes in their schools. The analysis here may help the schools in this process.

School Characteristics

Using school profile data from the Board of Education, we first compared a number of descriptive variables at the school level, to see if there were consistent differences between the gain and loss schools.

First of all, all four sets of gain or loss schools included both intermediate schools (grades 6-7-8) and junior high schools (grades 7-8-9).

Although the exceptional schools varied in the size of their student populations from 600 to 1524, there were no systematic differences among the four groups of schools. The average register in the attendance gain schools was 1164, compared to 1089 in the attendance loss schools; the figure was 1136 in the courses gain schools and 1131 in the courses loss schools. Similarly, the school utilization rates (a measure of school crowding) were not markedly different for the four groups: 72% for the attendance gain schools, 78% for the attendance losers, 80% for the course gainers, and 75% for the course losers.

The average class size reported in School Profiles was not significantly different between the exceptional gain and loss schools. For the attendance gain schools average class size was 27.7, for the attendance loss schools it was 28.9, for the courses gain schools average class size was 30.2, and for the courses loss schools it was 28.9. Let us acknowledge at this point that we did correlations between targeted student outcomes and the School Profiles data for all of the schools, not just the exceptional schools, and that average class size was the only variable that correlated significantly with an outcome. Average class size correlated positively with gain in courses passed ($r=.49$, $p<.01$). This is counter-intuitive, since one expects that class size will be particularly crucial to students at risk. Returning to the exceptional schools, what we notice is that in the gain schools greater measures were taken to counter the effects of large class size, for example through the special grouping of targeted students in smaller classes that was observed in one school, and the high personalization of DPP staff contact with students that was observed in two others.

In terms of the stability of the student population, again there was no consistent variation between gainers and losers. Calculating the percentage of students in the highest grade in the school (eighth or ninth) who had been in the school for three years, the average stability of this top class was 27.7% for the attendance gain schools, 28.9% for the attendance loss schools, 30.2% for the courses gain schools, and 28.9% for the courses loss schools.

In terms of student ability as measured by standardized reading and math test scores, there was only one consistent difference among the general student populations in the four sets of schools. At least a third of the students tested on grade level in math in three of the four attendance gain schools, while none of the attendance loss schools had this proportion of students on level in math. In the analysis for all schools referred to above, the correlation between the schools' average Mathematics Achievement Test score in 1986-87 and the attendance gain of targeted students approached significance ($r=.42$, $p<.05$). We think mathematics performance is a particularly strong indicator of the instructional quality of a school, so this finding does bear looking into further in subsequent analyses.

Attendance outcomes for the entire school populations did not vary consistently among the gain and loss schools. There were overall attendance gains in two of the four attendance gain schools, three of the four attendance loss schools, two of the four courses gain schools, and one of the five courses loss schools.

Finally, there was virtually no consistency between the rank of the schools on outcomes for targeted students in Year Two and the rank they held in outcomes for Year One. In several cases, schools with major losses in Year Two and been among the strongest gainers for the same outcome in Year One.

With the exception of higher mathematics test scores in the attendance gain schools and, perversely, larger class size in the courses gain schools, the gain schools did not differ systematically from the loss schools in characteristics presented in School Profiles. The principals of the gain schools were in most cases observed to be more actively involved in supporting the DPP programs in their schools than the principals of the loss schools. Still, there were exceptions to this generalization; the principal of one loss school was seen to be actively concerned while the principal of one gain school seemed to be actively hostile to the program.

Characteristics of Targeted Students

An average of 109 students were targeted in the attendance gain schools, 108 students in the attendance loss schools, 143 in the courses gain schools, and 121 in the courses loss schools.

There was, then, no pattern in the number of students targeted by the exceptional schools.

Although a fifth of the targeted students in DPP overall were in the ninth grade, only one of the exceptional schools, gain or loss, had more than a few ninth graders among the targeted students. The distribution of targeted students between the seventh and the eighth grades was comparable for the several sets of schools.

The targeted students in the attendance gain schools averaged 72% attendance during the prior year, while those in the attendance loss schools averaged 73% the prior year. From the standpoint of attendance itself, the samples were not different. However, the targeted students in the attendance gain schools averaged 70% of courses passed in the prior year, while those in the attendance loss schools averaged only 51%. From this standpoint, the students in the attendance loss schools were more at risk.

The prior year courses passed as well as prior year attendance were comparable for the targeted students in the courses gain schools and in the courses loss schools.

Targeted students had somewhat higher prior year reading test scores on the average in the attendance gain schools (DRP estimated 41.5) than in the loss schools (DRP estimated 37.7) and similarly higher prior year mathematics test scores (MAT estimated 30.3 vs. 25.3). In the courses gain and loss schools, the targeted students had comparable reading test scores (DRP estimated 42.7 vs. 41.7) but different mathematics test scores (MAT estimated 31.4 vs. 27.9).

Students identified by the Board of Education as LEP were a very small fraction of the targeted students in the exceptional schools, averaging less than 4% altogether. There were two attendance gain schools in which LEP students numbered more than 4%, three attendance loss schools with more than 4%, no courses gain schools with more than 4% and two courses loss schools with more than 4%.

There were greater proportions of older students in the loss schools than in the gain schools. The percentage of students overage in the attendance gain schools averaged approximately 63.5% and in the courses gain schools approximately 61.5%, while in the attendance loss schools they averaged approximately 71.8% and in the courses loss schools approximately 69.2%. The proportions of students who were two years or more overage, a very high risk group, were 25.3% in the attendance gain schools, 23.8% in the courses gain schools, 29.5% in the attendance loss schools, and 29.6% in the courses loss schools.

Targeted students' attendance improved or stayed nearly the same in the gain schools, and worsened in both the attendance loss schools and the courses loss schools. The targeted students

in the attendance gain schools averaged 78% attendance in Year Two, gaining on the average 6% over the prior year. The targeted students in the attendance loss schools averaged 69%, losing 4% over the prior year. The targeted students in the courses gain schools averaged 76% attendance in year Two, losing 1% from the prior year. The targeted students in the courses loss schools averaged 72% attendance in Year Two, losing 4% from the prior year.

The targeted students in the attendance gain schools passed 75% of their courses in Year Two, for a gain of 5% over the prior year. The targeted students in the attendance loss schools passed 55% of their courses in Year Two, for a gain of 4% over the prior year. The targeted students in the courses gain schools passed 79% of their courses in Year Two, which was a gain of 21% over the prior year. In the courses loss schools the targeted students passed 57% of their courses in Year Two, for a loss of 6% over the prior year. Thus courses passed increased for targeted students in both the attendance and the courses passed gain schools. Courses passed increased also for students in the attendance loss schools, but here the pass rate was still very low, while it fell to this level in the course loss schools.

Because not all students for whom there are MSSR records of service were included in the OEA evaluation sample or had complete outcome data if they were in the sample, a study was made to determine how the exclusion of cases might have affected outcomes for the schools. Not all of the data needed for this analysis are available, but it does appear that one school that gained in both attendance and courses passed, and another that gained in attendance only, might have had inflated outcome scores because of the loss of data for students who were more likely to have had low attendance (or a greater loss of these data relative to other schools).

In sum, the targeted stduents in the loss schools started the year somewhat more at risk than the targeted students in the gain schools. This was particularly true in the attendance gain schools vs. the attendance loss schools. Targeted students in the courses gain schools were younger and had higher math test scores than their counterparts in the courses loss schools. However, these variables did not subtract from the variance accounted for by schools in the regression analysis for courses passed.

Characteristics of Program

We have examined the timing of implementation of the Dropout Prevention Program components in the exceptional schools. In the areas of facilitation, guidance and counseling, and alternative education, there was a slight tendency for the program to have been implemented earlier during the year in the attendance and courses passed gain schools than in the loss schools. There were situations in both gain and loss schools where staff were not

appointed on time, or budgets were approved late, these events in fact being related. But school or CBO DPP staff in the gain schools tended to be more resourceful in dealing with these problems.

Looking at the stage of development of the components, one area, alternative education, appeared to be at a more advanced stage in the courses gain schools compared with the courses loss schools. Engaging, hands-on business enterprise or career-education video and field trip activities were found in virtually all of the courses gain schools.

The number of mail and phone services reported per school on the MSSR in November, February, and May combined did not differ greatly for the several groups. The number of these contacts averaged 619 for the attendance gain schools, 718 for the attendance loss schools, 646 for the courses gained schools, and 638 for the courses loss schools. Home visits, however, did vary meaningfully. The average number reported for the attendance gain schools was 191, for the attendance loss schools it was 129, for the courses gained schools it was 142, and for the courses loss schools it was 85. Three of the four attendance gain schools, but only one of the four attendance loss schools, reported over a 100 home visits attempted; likewise, three of the four courses gained schools, but only one of the five courses loss schools, reported over a 100 home visits attempted. School-parent conferences and guidance (summed), however, did not vary as strongly between the different groups of schools.

As home visiting was found to have a negative effect on attendance and courses passed in the regression analyses, its association here with the gain schools might be puzzling. However, the negative effect is partly an artifact of attendance outreach being directed to the most absent students. Here in an analysis where we are comparing <u>schools</u> that started with groups that were comparable from an attendance point of view but that had different outcomes, we see the distribution of the services in another light.

School-student conferences in the three months examined averaged 148 for the attendance gain schools, 99 for the attendance loss schools, 332 for the courses gain schools, and 101 for the courses loss schools. The average number of individual counseling services reported by the attendance gain schools was 572, while the average for the attendance loss schools was 422. For the courses gain schools, the average number of individual guidance services reported was 532 and for the courses loss schools this average was 123. Three schools that counted individual guidance services quite differently from the way other schools counted them are included in these figures. When they are excluded, the frequencies for the groups in the same order are 179 vs. 146 and 347 vs. 123. Individual student conference and guidance contacts, then, were higher on the average in the gain schools than in the loss schools, especially in the courses gain and loss schools.

The frequencies for group guidance were not distributed in this same way. The average number of group guidance services reported for the courses gain schools, 287, did exceed the average for the courses loss schools, 138, but the average for the attendance gain schools, 77, was lower than the average for the attendance loss schools, 143. The regression analysis leads us to expect to see group guidance being reported more frequently in the attendance gain schools as well as in the courses gain schools. However, (a) the effect of group guidance was not nearly as strong for attendance as for grades and (b) other things were going on in individual schools, even the exceptional schools, than just what appears at the most general level of analysis.

Extended day services averaged 453 in the attendance gain schools and 198 in the attendance loss schools. In the courses gain schools extended day services averaged 67, and in the courses loss schools they averaged 39. Linkage services reported in the attendance gain schools averaged 76, in the attendance loss schools averaged 52, in the courses gain schools averaged 11 and in the courses loss schools averaged 39. Finally, health staff contacts averaged 6 in the attendance gain schools, 61 in the attendance loss schools, 41 in the courses gain schools, and 60 in the courses loss schools.

Home visits, school-student conferences, individual guidance, and extended day were all reported as occurring more often on the average in the gain schools than in the loss schools. Mail and phone, parent conference-guidance, and group guidance were not consistently related to whether these schools had attendance and courses gains or losses, though group guidance was reported more for the courses gain schools. Linkage was inconsistent and health staff contact related negatively to gain and loss; the frequency of reports of these services tended to be low for both gain and loss schools.

The services that appear to have been more frequent in the gain schools tend to involve direct, personal student contact. Home visiting does not fit this generalization, especially as a home visit was recorded if it was attempted rather than just when someone was actually found at home. Perhaps home visiting is an index of a program's effort or caring. Finally, an engaging form of career education was observed more in the courses gain schools than in the courses loss schools.

Individual Gain Schools

Up to this point, these profiles of the exceptional schools have been largely quantitative. What is striking when we look at the gain schools and their programs more qualitatively is how much more seems to have been involved than just the execution of program guidelines.

In one attendance gain school no facilitator was appointed at the school level. A district facilitator functioned in lieu of school facilitators for all of the DPP schools in the district. There was a long delay in the hiring of a family assistant for the school's part of attendance outreach. The CBO staff felt that the targeting of many students occurred too late to have an impact at the beginning of the year when it was crucial. There were strains between some school and CBO staff. On the other hand, the BOE guidance counselor for the DPP and CBO staff worked well together and the principal was perceived by CBO staff as supportive. This principal judged that attendance was not as much a problem for the school as academic achievement. In a sense, he was correct--the prior year attendance of targeted students in his school was relatively high. Still, attendance improved, along with a smaller improvement in courses passed. This school fits the profile above in terms of high frequencies of services reported in the student contact areas, especially by CBO staff. An important additional element in this picture is that the entire school was reorganized into minischools during Year Two. The attendance of the school body as a whole improved 3.4% between 1985-86 and 1986-87. On the other hand, the attendance of a control group did not improve in this school. Thus there is evidence that both the school and the DPP program contributed to the attendance gain of targeted students.

In another attendance gain school, which was also a courses gain school, a facilitator who was regarded as successful in Year One was removed from the program to become a Dean and a struggle ensued for his replacement. The individual who won, on the basis of seniority, was given other, competing responsibilities in the school, including school-wide attendance and lateness. The district's DPP budget was approved very late, after having been turned down twice by OSP. On the other hand, targeting had been accomplished relatively early in this school, most of it having been done during the summer. The CBO site supervisor himself did a substantial amount of the facilitating. A school appointed Family Assistant and the CBO Outreach Worker functioned as a team to conduct home visits and, particularly, to contact students and their families <u>after</u> the students had returned from an absence, in order to secure their return and to cut down on further absences. This attendance outreach was supervised fairly closely by the District Facilitator, while the CBO site supervisor received a lot of support from the CBO Program Supervisor. The CBO site supervisor persuaded a teacher to offer a business enterprise program, the only business enterprise in the district (since the budget was late--this one business enterprise was voluntary). A highly trained social worker, the site supervisor conducted regular group guidance sessions. Because group guidance involved pull-outs, however, the principal cancelled them in March so that they would not compete with preparations for tests. Similarly, career education, which was conducted by the facilitator and began late, was cancelled in March. Did the sense of priorities reflected in these cancellations, together with the supports for students that the CBO mustered, make complementary contributions to the students' attendance and

grades? This could be, but the school as a whole declined in attendance between 1985-86 and 1986-87, and the control group in this school declined in attendance. Another complication that was implied earlier is that in this school about 20% of the targeted students left the school before the end of the year, it being a school with an exceptionally high turnover of students.

In yet another attendance gain school, this one in the Project Connect model, there was minimal district support. The principal delegated responsibility for the program to an assistant principal. Budget was late and several positions were filled late in the fall, including a guidance counselor. However, enterprises were developed early, including a photography project that was continued from the previous year. In all categories except home visits, relatively low numbers of services were reported from this school. This was partly a function of under-reporting services. However, access to targeted students was observed to have been enhanced by a semi-blocked arrangement of students in small-size classes. These small classes were achieved despite the fact that the average class size for the school as a whole (30.8) was higher than for any of the other attendance gain or loss schools. Both the school as a whole and the control group achieved attendance gains between 1985-86 and 1986-87.

In another of the courses gain schools, in Project Connect, no guidance services were recorded in November because there was no guidance counselor or SAPIS worker assigned to the program. Also, there was no school aide at the beginning of the year, which hampered keeping records more generally. In fact, however, two family workers were seeing students early in the morning and in group as well as individual situations throughout the day. One of them was trained as a SAPIS worker, so when her appointment came through, in February, guidance services were officially recognized and allowed to be recorded. The facilitator in this school was observed to be exceptionally committed to the students and involved in carrying out a career education program within the guidelines developed by OSP. The DPP staff appeared to be unusually accessible to the students, had good space, and had the full support of the principal. DPP staff in this school maintain that enabling students to pass courses is their highest priority. Attendance declined 2.5% for the school as a whole between 1985-86 and 1986-87, 1.5% for the targeted students, and 4.0% for the control group.

In yet another courses gain school in Project Connect, the principal was embroiled in political conflict with the district, but as the facilitator was also an assistant principal, administrative support for the DPP program was assured. Again, budget was late in 1986-87. In this school, however, DPP had been preceded by AIDP, which gave it an advantage over implementation in some of the other DPP schools. One of the activities that had been developed under AIDP was a chocolate factory and school store that Teachers College described in the Year Two Interim Report as teaching students management and

marketing skills and how to be responsible and work in teams. Students demonstrated a lot of enjoyment of this enterprise. On the Teachers College Survey, targeted students in this school reported receiving relatively high levels of service in the areas of trips (paid for with other, supplementary monies as well as with DPP funds), business enterprise, and home visiting. Their ratings of the school were among the highest for all schools on the scales for liking school and experiencing teacher regard, and the lowest for teachers putting them down when they returned from an absence. In addition to gaining in courses, and to a lesser degree, in attendance in year Two, in Year One the school ranked first among all 29 DPP schools in attendance gain and 7th in courses gain. The whole school gained in attendance between 1985-86 and 1986-87, though for the control group there was no change. In this school, the DPP program and schoolwide forces seem to be complementary in contributing to gains for targeted students.

Other schools that have not been focused on in this section, including the schools that lost attendance or courses passed, present many more questions. Teachers College will continue to pursue these in its study of the DPP in Year Three.

Conclusion

What has emerged from this analysis of the schools with exceptionally high gains or losses in Year Two is a complex picture. The gain schools differed from the loss schools more in their leadership style than in objective characteristics like school size. Not only did the principals tend to support dropout prevention more actively, but DPP facilitators or CBO site supervisors were more resourceful. In both the gain and loss schools there were various situations where one or another staff position had not been filled or was filled inadequately, but it was in the gain schools that this was dealt with more effectively, usually by someone else stepping in and meeting the need. Similarly, the gain schools coped more successfully with shortages of funds due to budgeting problems, or used other funds to supplement program monies. Several of the gain schools were particularly inventive in their ways of getting access to the students and, equally, of being accessible to students. Both counseling and career education, especially the enterprise activities, were seen as avenues for reaching students. The gain schools tended to have recorded more services that involved direct contact with students, but record keeping itself was not necessarily a priority with these schools. The gain schools attempted more home visits, though the contribution of home visits to students' attendance and passing courses is far from being understood. The DPP staffs of the schools that gained appeared to be driven more by the goals of the program than by a need to conform to external expectations. Finally, the targeted students in the attendance gain schools were less at risk on the basis of prior year performance than the targeted students in the

attendance loss schools. The targeted students in the courses passed gain schools were more comparable to those in the schools that lost in courses passed, at the same time that the differences in accomplishment between the courses gain and loss schools were very large.

Chapter Seven

PROGRAM COSTS AND COST-EFFECTIVENESS DPP MIDDLE SCHOOLS, 1986-87

Introduction

This section of the Year Two Final Report deals with the financial aspects of dropout prevention services in the middle schools, and with their relation to program outcomes. Its purpose is two-fold:

a) to present the overall, district, and school-level budgets and expenditures for the middle school Dropout Prevention Program, focusing particularly on the portion of the program supported by special city and state funding; and

b) to match program costs with program outcomes in order to compare the cost-effectiveness of the middle schools, community school districts (CSDs), and program models in the DPP.

Data Sources and Limitations

Data on funding allocations, budget modifications and expenditures were obtained from the city's Office of Management and Budget (OMB) and from a variety of units within the Board of Education (BOE), including the Office of Budget Operations and Review (BOR), the Office of Student Progress (OSP), the Office of Funded Programs (OFP), and the Division of High School's OTPS office. In both the collection and analysis of these data, several problems arose concerning which type of cost figures to use and how to obtain costs at the school level.

Unit costs vs. real costs. Customarily, school and district budgets are developed on the basis of unit costs, i.e., constant salary amounts for teachers, guidance counselors, and so on. In this way, districts and schools that attract more senior and thus higher paid staff are not penalized by showing higher expenses in their personnel lines. According to the Office of Student Progress, maximum teacher salaries were primarily used as the basic units in developing DPP budgets for Year Two, in order to encourage the full involvement of well-qualified personnel and to ensure that no district's actual costs exceeded its budget. If the DPP budget figures were true unit figures, then the differences among budgets in the personnel category would reflect differences in the level of planned staffing, rather than differences in how much staff would be paid. However, the DPP budgets are not true unit-based budgets, for two reasons. First, in cases where districts knew which staff person would fill a certain position, that person's actual salary was budgeted. Second, in cases where staff had not yet been identified, the community school districts used different salary estimates

(assumed to be maximums) in their computations. For example, in District 17, the three school facilitators had already been chosen and were budgeted at their real (widely differing) salary levels, while in District 32, a constant was budgeted for each facilitator line, and it was substantially lower than figures used in other districts. For these reasons, we interpreted the DPP budgets as real-cost estimates.

We developed estimates of unit-cost budgets and expenditures for each district and school, using monitoring reports from OSP, field notes from our own staff, and other documents that summarized planned and actual staffing levels. (This analysis will be described later in this chapter.) However, we were not content to use these figures in this report, for two reasons. First, both the budgets and expenditures are estimates based on a number of sources, and we have no foolproof way to verify their accuracy. The only complete BOE accounting of personnel and OTPS budgets and expenditures available to us was in terms of real dollars spent, not unit values. Second, since we had reported real dollar expenditures for the first year of DPP, a unit-cost breakdown would not permit comparisons between Year One and Year Two. Therefore, this chapter will present real-cost data on middle school budgets and expenditures.

District-level vs. school-level costs. Although program outcome data were available for each middle school, budget and expenditure figures were aggregated and reported only at the district level for both school and CBO operations. As there was greater variation in outcomes at the school level than at the district level, it was important to be able to examine cost-effectiveness at the school level as well. We used original school building plans, OSP monitoring reports, and on-site observations to estimate the percentage of district costs that should be allocated to each school, and thereby to construct a school-level estimate for expenditures. Thus, although school building plans and monitoring reports did not supply firm cost figures for school-level DPP staff, they were helpful in determining the relative proportion of each district's DPP budget available to its participating middle schools.

Program Funding

Public funding for the Dropout Prevention Initiative in Year Two came from three primary sources: reimbursable funds through the state's AIDP program, the city's special 0832 tax levy, and the city's regular school tax levy. Overall, the city provided almost twice as much support as the state to the middle school program.

AIDP Reimbursable Funds: In addition to support for the city's existing AIDP program, $3,221,700 in state AIDP reimbursable funds also were made available to the city's Dropout Prevention Initiative. Of this amount, $1,672,570 (or 52%) was assigned to the middle schools, including $1,470,000 for school

and CBO operations in the ten community school districts, and $202,570 for increases in middle school CBO contracts to cover inflation and annualization.

City 0832 Tax Levy: According to staff in the city's Office of Management and Budget, its 1986-87 allocation to the Board of Education for dropout prevention was $10.2 million. Of that amount, OMB earmarked $5.1 million for the high school program and $3.0 million for the middle schools/CSDs. The remaining $1.695 million was scheduled by OMB to cover special training in effective school practices for professional school personnel, data tracking systems, and program evaluation.

According to its Allocation Memorandum No. 10, dated July 31, 1986, BOE's Office of Budget Operations and Review allotted city tax levy funds directly to the schools and districts as follows:

High Schools	$5,355,000
Districts	3,150,000
Total	$8,505,000

City Non-0832 Tax Levy: Regular city tax levy funds of $194,526 were allocated to support program management of the high school portion of the Dropout Prevention Program; no specific funds were allocated for middle school program management.

The total 1986-1987 DPI allocation from all three sources was $7,098,655 for the high school program, $4,822,570 for the middle school program, and $1,695,000 for other central functions, for a grand total of $13,616,226. (See Table 7-1.) The middle school portion represents 35.4% of total program funding (Figures 7-1 and 7-2).

Allocations, Budgets, and Expenditures

As in Year One, monies for the middle school program were channeled through the community school districts, which were responsible for program/budget development and oversight. In general, the allocation formula remained basically the same in 1986-87, with only slight increases made in the per school allotment, rising from $150,000 per school in Year One to $157,500 in Year Two (the only exception being a two-school district).

Schools in the five districts participating in the Project Connect model continued to have use of their full budget amounts for program implementation, and thus benefited fully from the budget increases. In the five CBO model districts, the portion of the budget available for school-based facilitation and other services rose from a basic $50,000 per school in Year One to between $52,500 to $59,800 in Year Two. These districts also were provided an additional varying amount out of AIDP funds to

TABLE 7-1

Program Allocations and Budgets, by Funding Source
Dropout Prevention Initiative, 1986-87

Program Category	City DPP Tax Levy	Regular Tax Levy	State AI/DP	Total
High School DPP Administration	--	$194,526	$ 154,762	$ 349,288[1]
13 High Schools (10 DPP, 3 AIDP/OS)	$5,355,000	--	$1,394,367[2]	$6,749,367
10 Middle School Districts	$3,150,000	--	$1,672,570[3]	$4,822,570
Other	$1,695,000	--	--	$1,695,000
TOTALS	$10,200,000[4]	$194,526	$3,221,699	$13,616,225

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1. Budget figures given by Chancellor's office staff

2. Budget figures covering CBO contract increases, and Operation Success in four high schools

3. Budget figures covering CBO contract increases and basic PC and CBO school programs in middle schools

4. Allocation figures from BOR Allocation Memorandum No.10, 7/31/86

Figure 7-1

DROPOUT PREVENTION INITIATIVE FUNDING

Total Funds, 1986–87

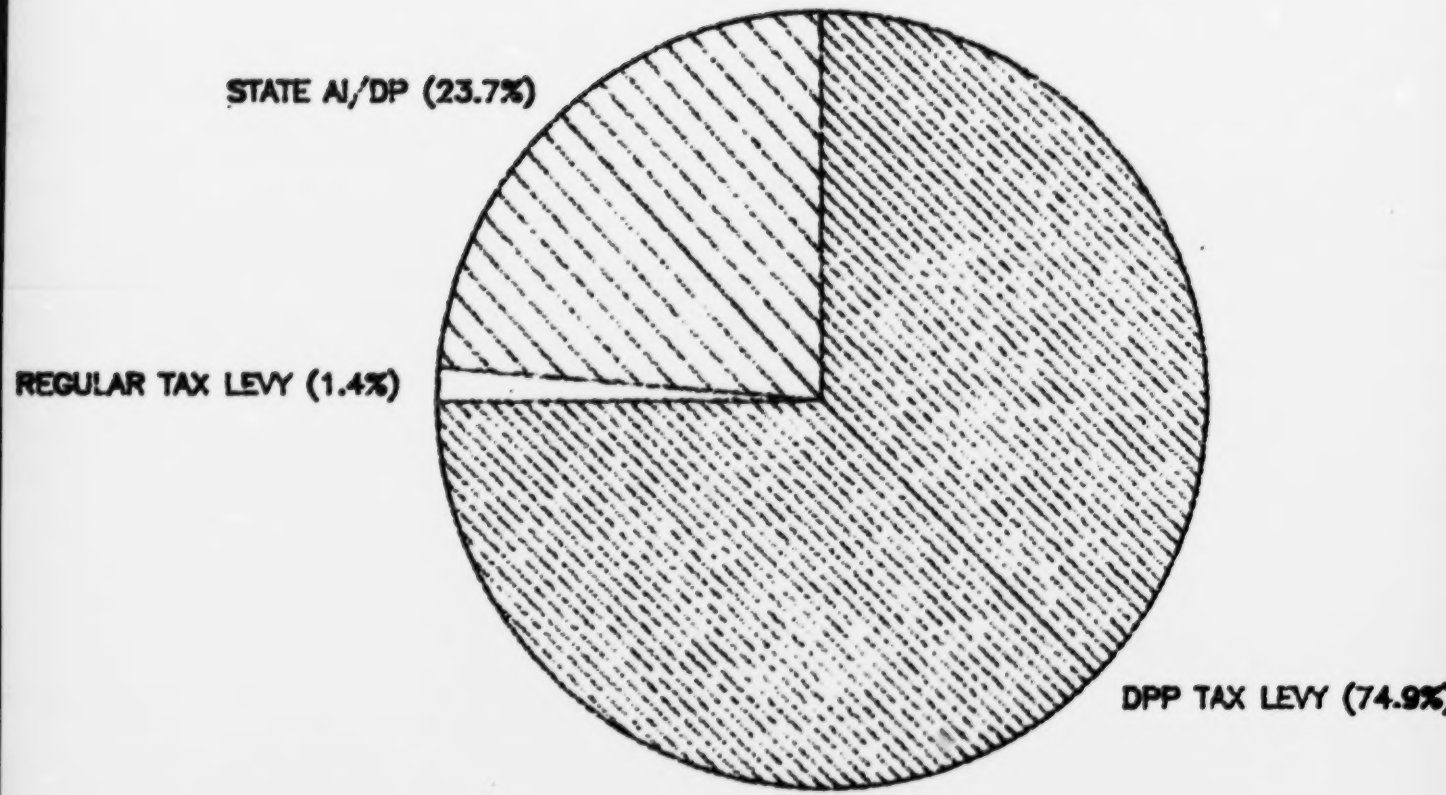
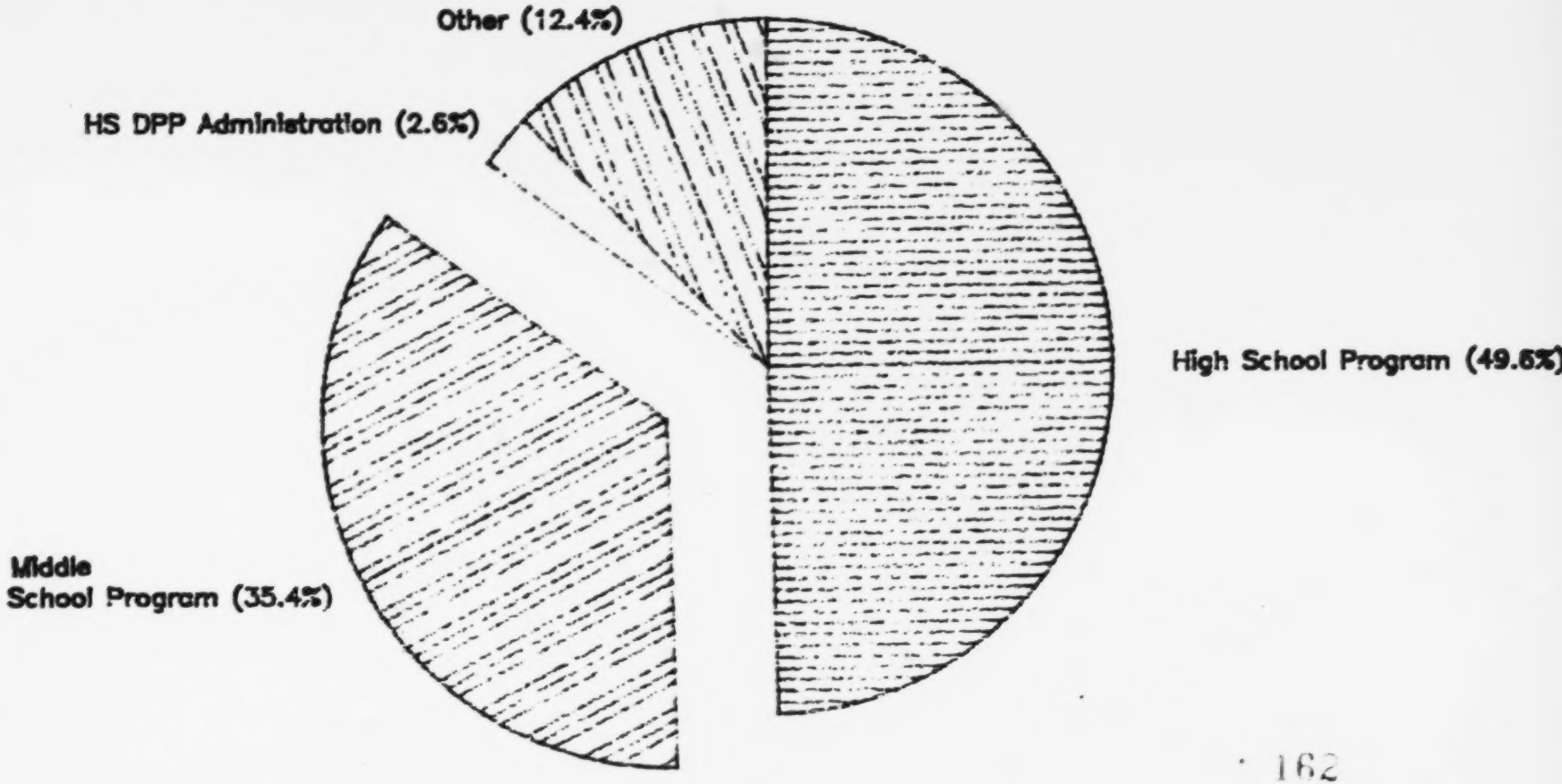


Figure 7-2

ALLOCATIONS TO PROGRAM CATEGORIES

Dropout Prevention Initiative, 1986–87



cover CBO contract increases.

Table 7-2 (Columns 1-8) provides a more detailed picture of Project Connect and CBO districts in Year Two in terms of their original and revised allocations from 0832 tax levy and AIDP funds, and budgeted amounts for CBO and school operations. Information about authorization levels or allocations were obtained from various memoranda and circulars issued by the funding source/authority (e.g. state, city, or BOE), while final budget totals were reported in official agreements, such as approved contracts with CBOs and budget modifications between the districts and the Office of Student Progress.

Columns 9 through 14 in Table 7-2 show CBO and school program expenditures, and the distribution of those costs to city and state funding sources. All cost data were taken from BOE's computerized accounting system (STAR) as reported by the Office of Budget Operations and Review in November 1987, with one exception -- fringe benefit costs. Although STAR reported a budget amount for fringes, it did not report an amount for fringe expenditures. At the recommendation of BOR staff, we estimated the fringe for each district based on the proportion of its DPP personnel budget assigned to fringe. These proportions varied somewhat from district to district.

District/model allocations. In 1986-87, the middle school Dropout Prevention Program received a total allocation of $4,822,570 -- up approximately $422,570 from the previous year. All districts began with the same base funding from city tax levy and AIDP sources, except in District 27 where only two middle schools participated in the program. The city allocated $1,575,000 apiece to the CBO and PC models, for a total of $3,150,000. Similarly, except for District 27, original allocations from AIDP funding were equal among all districts. However, increases in AIDP funding that were approved in July and again in October (1986) for CBO annualization and inflation factors expanded the monies available for districts in the CBO model by $202,571. These additional monies instituted variation among the CBO district allocation totals and brought the AIDP allocation for CBO districts up, from $105,000 less than the PC districts to approximately $48,000 more. Of the total middle school allocation, the city's contribution declined slightly from 68% in Year One to 65% in Year Two, while the AIDP portion rose correspondingly from 32% to 35%.

District/model budgets. In terms of the total amount budgeted for DPP in the middle schools, the five CBOs received $1,466,100 and the 29 schools received $3,213,874 (Figure 7-3). Budget negotiations between BOE and CBO contractors and between OSP and the districts resulted in final district budget totals that ranged from a low of $354,474 in District 14 (due to budget negotiation problems) to a high of $529,500 in District 15 (Table 7-2, column 8). Generally, these were in line with allocation levels (Table 7-2, column 5) in all but three districts: 3, 14, and 27. (In District 27, it appears that a final budget was

TABLE 7-2

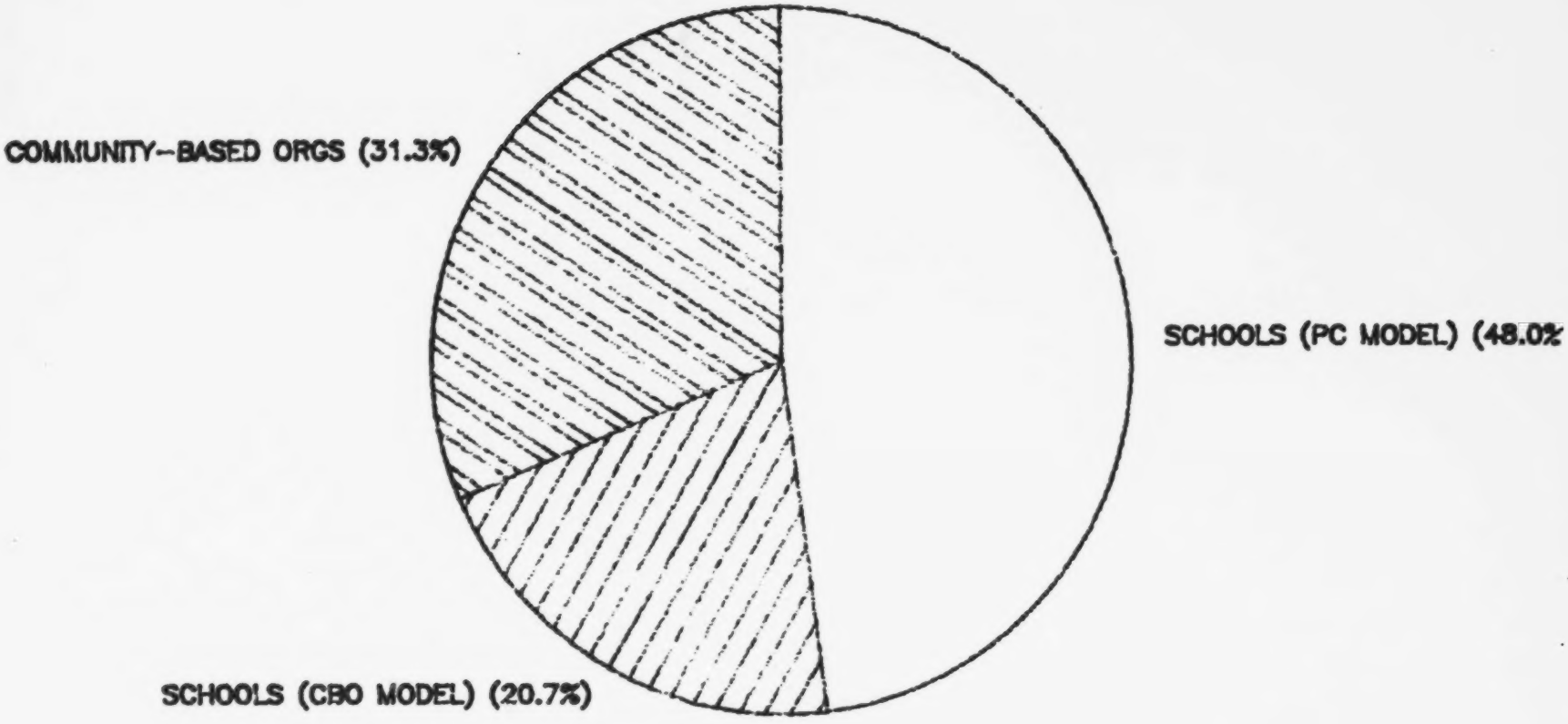
District Allocations, Budgets, Expenditures, and Funding Sources
DPP Middle Schools, 1986-87

	FUNDING ALLOCATIONS					BUDGETS			EXPENDITURES				COST TO FUNDING SOURCES	
	0832 TAX LEVY	BASIC AIDP	AIDP INCREASES	TOTAL AIDP	TOTAL DPP (CITY,STATE)	FINAL CBO CONTRACTS	SCHOOL BUDGETS	TOTAL DIST. BUDGETS	CBO COSTS	SCHOOL COSTS	TOTAL DIST. COSTS	EXPEND RATE	PAID BY AIDP	PAID BY 0832 TAX LEVY
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
CBO MODEL														
DISTRICT 3	$315,000	$157,500	$74,571	$232,071	$547,071	$315,000	$157,500	$472,500	$300,000	$154,579	$454,579	96%	$232,071	$222,508
DISTRICT 9	$315,000	$157,500	$10,500	$168,000	$483,000	$140,500	$342,500	$483,000	$41,874	$210,418	$252,292	52%	$168,000	$84,292
DISTRICT 15	$315,000	$157,500	$57,000	$214,500	$529,500	$357,000	$172,500	$529,500	$357,000	$168,458	$525,458	99%	$214,500	$310,958
DISTRICT 19	$315,000	$157,500	$10,500	$168,000	$483,000	$303,600	$179,400	$483,000	$276,094	$166,252	$442,346	92%	$168,000	$274,346
DISTRICT 27	$315,000	$52,500	$50,000	$102,500	$417,500	$350,000	$117,500	$467,500	$309,525	$76,409	$385,934	83%	$102,500	$283,434
CBO SUBTOTAL	$1,575,000	$682,500	$202,571	$885,071	$2,460,071	$1,466,100	$969,400	$2,435,500	$1,284,493	$776,116	$2,060,609	85%	$885,071	$1,175,538
PC MODEL														
DISTRICT 7	$315,000	$157,500	$0	$157,500	$472,500	$0	$472,500	$472,500	$0	$331,502	$331,502	70%	$157,500	$174,002
DISTRICT 10	$315,000	$157,500	$0	$157,500	$472,500	$0	$472,500	$472,500	$0	$414,718	$414,718	88%	$157,500	$257,218
DISTRICT 14	$315,000	$157,500	$0	$157,500	$472,500	$0	$354,474	$354,474	$0	$230,647	$230,647	65%	$157,500	$73,147
DISTRICT 17	$315,000	$157,500	$0	$157,500	$472,500	$0	$472,500	$472,500	$0	$370,883	$370,883	78%	$157,500	$235,737
DISTRICT 32	$315,000	$157,500	$0	$157,500	$472,500	$0	$472,500	$472,500	$0	$389,859	$389,859	83%	$157,500	$232,359
PC SUBTOTAL	$1,575,000	$787,500	$0	$787,500	$2,362,500	$0	$2,244,474	$2,244,474	$0	$1,737,609	$1,737,609	77%	$157,500	$232,359
GRAND TOTAL	$3,150,000	$1,470,000	$202,571	$1,672,571	$4,822,571	$1,466,100	$3,213,874	$4,679,974	$1,284,493	$2,536,079	$3,820,572	82%	$1,672,571	$2,148,001

Figure 7-3

SCHOOL AND CBO BUDGETS

DPP Middle Schools, 1986-87



approved that exceeded its authorization level by $50,000.)

Overall, CBO-model district budgets were approved at higher levels than were PC-model district budgets. The schools in the CBO model retained some control over a portion of the budgeted funds (subject to district/OSP approval). Excluding District 9 (which, as explained in an earlier section of this report, began the year as a CBO district and later shifted to the PC model), the average percentage reserved for school use in the CBO-model districts was 32%, with a range from 25% in District 27 to 37% in District 19.

District/model expenditures. Districts varied considerably both in their spending levels and in their expenditure rates (Table 7-2, columns 11-12). In no instance did a district overspend its budget; if anything, there were problems with underspending. The range in rate of spending was a low of 52% in District 9 (again, due to the shift from a CBO to PC model) to a high of 99% in District 15. The range for the CBO districts was 52% to 99%, and for the PC districts, 65% to 88%. On average, CBO districts spent a higher proportion of their budgets than did those in the PC model -- 84% vs. 78% -- even when District 9 is considered. When District 9 is excluded from the calculation, the average rate of spending within the CBO model rises dramatically to 93%.

The CBOs themselves were primarily responsible for the higher spending rates, as they represented the majority of the district budgets and spent on average 94% of their budgets (excluding District 9 which eventually cancelled its CBO contract). Contract negotiations with CBOs were managed through the Board's newly-formed Division of Planning, Program Development, and External Relations, so budget snags at the district level did not keep the CBOs from beginning program operations once their own budgets were approved. However, the schools in these districts also managed to spend a greater portion of their budgets than did the schools in the PC districts. The range was from a low of 61% in District 9 to a high of 98% in District 3, averaging 83% (as compared to only 78% in the PC districts, as cited earlier).

We examined the school-based portion of each district's budget, in order to determine where underspending occurred. (District 9 was excluded from this analysis.) Three of the four CBO districts actually overspent their budgets for school personnel, by an average of $12,900. The other district underspent by $12,500. In contrast, the PC districts underspent in personnel salaries a total of approximately $253,000, or $50,600 per district. Two of the CBO districts and three of the PC districts underspent their professional "per session" (or hourly) budgets, but only by an average of $1,260. All districts underspent their OTPS budgets. The amount of underspending ranged from only $7,000 in one district to $52,000 in another. The averages were similar between the two models: $21,250 in the CBO districts and $22,600 in the PC districts.

Various explanations have been given for the substantial underspending of the school-based portions of the DPP budgets. Staff vacancies and late budget approvals were the most frequently cited causes, the latter because they affected staff hirings and delayed or prevented OTPS purchases. Board of Education hiring procedures also resulted in some underspending; staff were identified for positions but could not be immediately hired due to fingerprinting and other BOE requirements. Another factor cited was bookkeeping error in certain districts, whereby charges to the DPP budget line were late or inaccurate, and corrections were not journalized in timely fashion. Finally, there were discrepancies between budgets and expenditures in personnel categories because the budgets were sometimes based on maximum salaries or other estimates that simply did not correspond to the actual salaries of the staff who were hired.

Distribution of Program Costs

Looking at the relative cost of the middle school Dropout Prevention Program to the city and the state (Table 7-2, columns 13-14), it appears that although the state's contribution through AIDP to the total allocation was set at 35% for 1986-87, it was billed for approximately 44% of the total costs, with the city assuming the remaining 56%. This shift from the allocation percentages is a result of the reimbursable nature of AIDP funding, which encourages the Board of Education to bill the state up to its maximum allocation before using city money.

Analysis of Program Expenditures

Districts and models. The average district expenditure for the Dropout Prevention Program in 1986-87 was $382,057. The ten community school districts varied considerably in the amount of money they spent for the program (Table 7-3). District 15 (CBO model) spent the most money -- $525,458, while District 14 (PC model) spent the least -- $230,647. The expenditure total for the PC model was $1,737,609, and for the CBO model (excluding District 9) was $1,808,317. The PC districts spent $347,522 on average, while the average for the CBO districts was $452,079 (again, excluding District 9).

District per-pupil expenditures. To what extent are the higher expenditures in some districts related to larger numbers of students served? In 1986-87, the CBOs were permitted to reduce their target populations to 100 students per school, or 300 per district (except in District 27 where the CBO committed to serve 300 students in two schools). School personnel in the CBO-based programs were expected to serve 50 students, but it was unclear whether they would be the same students served by the CBO or additional students. The Project Connect programs were still expected to serve 150 students. Not surprisingly, PC districts reported the highest numbers of students served (Table 7-4), with

TABLE 7-3

1986-87 Middle School DPP Expenditures, by District

District	Model	Program Cost	Rank
15	CBO	$525,458	1
3	CBO	$454,579	2
19	CBO	$442,346	3
10	PC	$414,718	4
32	PC	$389,859	5
27	CBO	$385,934	6
17	PC	$370,883	7
7	PC	$331,502	8
9	CBO/PC	$252,292	9
14	PC	$230,647	10

Average expenditures, CBO districts: $452,079*
PC districts: $347,522

TABLE 7-4

Total Students in Program, by District
DPP Middle Schools, 1986-87

District	Model	Total DPP Students	Rank
OVERALL		3922	
14	PC	490	1
10	PC	466	2
17	PC	463	3
32	PC	459	4
9	CBO/PC	448	5
27	CBO	374**	6
7	PC	356	7
19	CBO	328	8
15	CBO	318	9
3	CBO	311	10

Total students in CBO model: 1331*
Average per district: 333

Total students in PC model: 2234
Average per district: 447

* District 9 is excluded from all model-level analyses
** Although 283 students were listed on the official roster as program participants in District 27, the CBO in that district reported to OSP/OEA that they served an additional 91 students. Those students are included in the district's target population for cost analyses.

an average district DPP enrollment of 447, as compared to 333 in the CBO model (Table 7-4).

Comparing Tables 7-3 and 7-4, we see that the most costly programs at the district level actually served the fewest students, putting them at the high end of the scale in terms of per pupil expenditures (Table 7-5). Districts 15 and 3 had the highest total expenditures ($525,458 and $454,579, respectively) but served the fewest students (318 in District 15, 311 in District 3), resulting in the highest per-pupil costs ($1652 per student in District 15, $1462 in District 3). The districts that spent the least amount of money (Districts 9 and 14) still maintained a target population size at or above the desired level, and well above the overall average of 401 students per district (448 and 490, respectively), making them again the lowest spenders in terms of per pupil costs ($563 per student in District 9 and $471 in District 14). (It should be noted that special circumstances prevented both of these low-spending districts from spending their full budgets: District 9 spent very little in the fall term and finally cancelled its CBO contract in March, and District 14 did not obtain budget approval from OSP until the spring.)

Several conclusions can be drawn from these comparisons. First, target group size itself was not driving up program costs. The top three spenders in terms of total program costs had the smallest target populations and thus were still the highest in terms of per pupil expenditures. Second, in general, the CBO model appears to be the most expensive, with its greater absolute costs and smaller target populations. The majority of PC districts, even though they spent fewer dollars, still managed to serve a greater number of students. However, the smaller DPP enrollments in the CBO-model schools were in part due to decisions made by BOE staff about which 50 students they would serve -- the same students as those the CBO served, or a different group. Thus, the CBOs may be at an unfair disadvantage when expenditures are figured as per pupil costs.

Schools. As explained at the beginning of this chapter, individual school costs were estimated by apportioning district DPP costs to schools according to information obtained from original school building plans, OSP monitoring reports, and on-site observations. CBO expenditures were divided equally and added to the school costs in CBO districts.

The cost breakdowns among the DPP schools within each district were fairly comparable. For example, on the basis of information from many sources, it was apparent that school personnel expenditures in half of the districts could be divided evenly, and were within 2%-5% of each other in most of the other districts. Only District 27 showed extreme differences in personnel costs for its two schools: 39% in School 26 versus 61% in School 23. Surprisingly, the personnel cost variation was not in the direction of the variation in target group size.

TABLE 7-5

Per-Pupil Expenditures, by District
DPP Middle Schools, 1986-87

District	Model	Total Cost	N	Per-pupil Cost	Rank
15	CBO	$ 525,458	318	$1,652	1
3	CBO	454,579	311	1,462	2
19	CBO	442,346	328	1,349	3
27	CBO	385,934	374*	1,032	4
7	PC	331,502	356	931	5
10	PC	414,718	466	890	6
32	PC	389,859	459	849	7
17	PC	370,883	463	801	8
9	CBO/PC	252,292	448	563	9
14	PC	230,647	490	471	10

Average cost per pupil, CBO districts: $1359**
PC districts: 778

* Although 283 students were listed on the official roster as program participants in District 27, the CBO in that district reported to OSP/OEA that they served an additional 91 students. Those students are included in the district's target population for cost analyses.

** District 9 is excluded from all model-level analyses.

Turning to Table 7-6, we see that schools generally followed the spending patterns of their districts: the highest-spending schools were in the highest-spending districts and the lowest-spending schools were in the lowest-spending districts. School 27 in District 15 had the highest DPP expenditures ($177,590), and the other two schools in that district ranked second and third in school expenditures. The only major deviation was in District 27, where the district expenditures ranked sixth but the per-school expenditures were higher because the district budget was divided between only two schools. The three schools in District 14 all ranked lowest on total expenditures ($76,175 per school).

The average per pupil cost for the middle school Dropout Prevention Program in 1986-87 was $952. Schools varied in their per pupil expenditures from a low of $443 per student in the schools of District 14 to a high of $1741 in School 27. The eight schools with the highest per pupil expenditures (Schools 16, 19, 22, 23, 27, 32, 40, and 42) all came from the four districts that ranked high overall in this regard, while the schools spending the least per pupil came from the lowest per-pupil expenditure districts. The per pupil average was $778 for schools in the PC model, and $1359 for schools in the CBO model.

Relationship between Program Costs and Implementation

We examined how the differences among schools and districts in expenditures for DPP reflected differences in program implementation, particularly in terms of level of staffing. We found that, while school programs within districts often resembled one another (resulting in the even cost breakdown described earlier), no two district programs were identical, even within the same program model.

In the Project Connect model, the basic staffing pattern across all five districts was a .4 (FTE) school facilitator, a .6 career education teacher, and at least two para-professionals, such as a family assistant, school aide, or SAPIS worker. The main planned variation in this pattern was the use of a DPP-paid part-time district coordinator in three districts and a .5 guidance counselor in each school in two districts. Because it was the only district with both of these additions, District 17 was projected to be one of the most expensive PC programs. In real dollars, it came in third, with bookkeeping and billing practices apparently explaining some its lowered costs. Though it did not have a guidance counselor, District 19 came in highest in actual dollars, partly because it billed for a full-time district coordinator, rather than the .5 one as budgeted.

Since schools appear to have had identical staffing plans within each PC district, whatever differences in spending that emerged were due largely to salary variations and to vacancies at specific schools. For the most part, the pedagogic/ administrative positions in the PC programs were staffed as

TABLE 7-6

Program Expenditures, Per School and Per Student
DPP Middle Schools, 1986-87

School Code	District	Model	DPP Students	Total DPP Expenditures	Expenditures Per Student
16	3	CBO	101	$ 146,594	$ 1,451
32	3	CBO	106	153,993	1,453
42	3	CBO	104	153,993	1,481
34	7	PC	95	89,529	942
15	7	PC	131	120,986	924
14	7	PC	130	120,986	931
25	9	CBO/PC	161	83,517	519
41	9	CBO/PC	150	83,517	557
24	9	CBO/PC	137	83,517	610
33	10	PC	156	137,023	878
35	10	PC	146	137,023	939
17	10	PC	164	137,023	836
28	14	PC	172	76,175	443
39	14	PC	175	76,175	435
21	14	PC	143	76,175	533
27	15	CBO	102	177,590	1,741
40	15	CBO	106	171,741	1,620
22	15	CBO	110	176,128	1,601
31	17	PC	133	122,575	922
36	17	PC	156	122,575	786
18	17	PC	174	122,575	704
30	19	CBO	114	146,969	1,289
37	19	CBO	115	146,969	1,278
19	19	CBO	99	146,969	1,485
26	27	CBO	234	185,009	791
23	27	CBO	140	200,925	1,435
29	32	PC	160	135,360	846
38	32	PC	152	128,872	848
20	32	PC	147	125,627	855

planned and appeared to have been fairly stable. However, in three districts there were in fact vacancies in some of the para-professional positions during most of the school year.

Much more variation in staffing patterns was evident among and within the CBO districts. The school facilitator function showed the most consistency (a .4 FTE position). One district, however, did not budget for school-level facilitators at all, and a district-level facilitator served all schools. In the remaining districts, one school never hired a facilitator, at least one had a vacancy for part of the year, and the percent time of the facilitator position varied from .2 to .5 FTE across the other schools.

Part-time BOE guidance counselors provided dropout prevention services in only two CBO districts, and teachers were generally not paid for by the program. (However, in District 19, schools provided teachers out of their regular tax levy funds.) Schools in every CBO district planned to have at least one para-professional working in the program, but vacancies persisted in the family assistant position in two districts. In sum, though it is harder to pin down a basic pattern for the CBO districts than for the PC districts, the overall configuration seemed to be a part-time pedagogue and a full-time para-professional as the school's contribution to the Dropout Prevention Program.

Overall, then, there do appear to have been staffing differences that could account for expenditure differences across the districts. But it still might be true that the variations in program spending were due to variations among salary levels for the same positions (in other words, higher program costs might be due to higher salary rates in some districts). To examine this possibility, we constructed a table of personnel expenditures for each school that was based on unit salary rates for each staff position (teacher, guidance counselor, etc.). We then compared these estimated personnel expenditures to actual expenditures as reported by BOR. These figures are shown in Table 7-7.

Seven of the ten districts show essentially no significant difference between expenditures based on unit figures and those based on actual (BOR) figures. In the other three districts, actual costs fall below estimated costs by a sizable margin (18% in District 17, 21% in District 7, and 31% in District 14). There is some reason to believe that the large differences in Districts 14 and 17 might be due to late budgeting and/or bookkeeping factors; the difference in the District 7 figures appears due to our estimating (on the basis of monitoring forms and site observations) the paraprofessional salary line to be higher than is indicated by the actual expenditures. In effect, then, it might be that the use of actual expenditure figures *underestimates* the true DPP costs in Districts 7, 14, and 17, which will then result in lower per pupil costs and higher cost-effectiveness ratios for these districts.

Table 7-7 shows the rankings among districts in terms of

TABLE 7-7

District Expenditures Calculated with Actual and Unit Figures
DPP Middle Schools, 1986-87

Model	District	Rank when using Actual Expenditures	Rank when using Unit Cost Estimates	Difference between Actual and Unit Expenditures as % of Actual Expenditures*
PC	10	1	2	5.0 %
	32	2	3	4.0 %
	17	3	1	21.0 %
	14	4	4	31.0 %
	7	5	5	18.0 %
Variation between highest and lowest districts:		$138,114	$114,500	
CBO	9	1	2	(3.0 %)
	3	2	1	4.0 %
	19	3	3	.4 %
	15	4	4	.8 %
	27	5	5	4.0 %
Variation between highest and lowest districts:		$81,337	$63,800	

* A value in parentheses indicates that actual expenditures exceeded unit cost estimates by the percent given, figured as a percent of actual expenditures. In general, unit cost estimates exceeded actual expenditures.

expenditures calculated on real dollars and unit dollars. When unit costs are used instead of actual expenditures, the relative positions of Districts 7 and 14 do not change. Thus, although their per pupil costs and cost-effectiveness ratios change depending on which expenditure figures are used, their relative costs and cost-effectiveness do not. District 17 moves from being the third most expensive to the most expensive district, and District 9 drops below District 3. Despite these observations, we are still obliged to consider actual expenditures the best estimates of the true costs of DPP.

As one last way of assessing how much the variation in expenditures among districts is due to salary differences, we considered the total variation among districts' personnel budgets, using both the actual expenditure and unit cost figures. Using estimated unit costs, the difference between the most expensive district (District 17) and the least expensive district (District 27), in terms of personnel salaries, is $242,500. Since salaries are standardized across districts when unit costs are used, this figure represents the variation among districts that is due to differences in staffing levels. Using actual expenditures, the difference between the most expensive district (District 10) and the least expensive district (District 27 again) is $221,974. Since this figure is actually somewhat less than one might expect on the basis of staffing differences, we can conclude that salary differences account for only a small portion of the differences among district costs. This is true for each program model as well. In the PC model, the most and least expensive districts, using unit costs, vary by $114,500; the comparable figure using actual expenditures is $138,114. In the CBO model, the variation between the highest and lowest districts in terms of unit costs is $63,800; it is $81,337 when actual expenditures are used.

Finally, we examined whether staffing differences were significantly different between the CBO and PC program models, given the differences in their overall budgets, expenditures, and rates of expenditures. In general, each school in the Project Connect districts employed one part-time facilitator, one part-time teacher (often the same person), between two and four para-professionals (family workers, educational aides, or SAPIS workers), and, in two districts, a part-time guidance counselor. This totals to an average of three to five FTE staff positions per school. In the Project Connect model, other teachers and/or guidance counselors were also paid hourly salaries to participate in the program, for example in the extended day activities. Schools in the CBO model generally employed one part-time facilitator or guidance counselor, and one para-professional. The CBOs added, on average, three or four other staff persons, usually a site supervisor, one or more case workers, and often a specialist for alternative educational programs or other special activities. Thus, a comparable number of staff persons were available to serve students in both models.

Effects of Expenditures per Student on Program Outcomes

This section discusses the analysis of the effects of expenditures on three outcome measures for the Dropout Prevention Program in 1986-87. The basic approach used here is to relate the outcome measure to the expenditure per student in each of the middle schools. The calculations of the three outcome measures --change in attendance, proportion of courses passed, and reading scores -- are described in Chapter Four. The per-school cost estimates were obtained by assigning district costs proportionately to the schools, as described in an earlier section of this chapter; the figures are shown in Table 7-6.

For each of the three program outcomes, we ran a simple regression in which the outcome (change in attendance, change in proportion of courses passed, etc.) was the dependent variable and the expenditure per student was the independent variable. As can be seen from the results reported in Table 7-8, for each of the four regressions, the coefficient for the expenditure variable had the expected positive sign, indicating that more expenditures resulted in a higher outcome. Nevertheless, none of the coefficients were statistically significant, and so we cannot reject the hypothesis that there is no relationship between outcomes and expenditures. The strongest result is in the regression for attendance change; this is the only coefficient that is greater than its standard error.

This general pattern can be seen graphically in Figures 7-4 through 7-6. The top panel of each figure plots the actual expenditures and outcomes for each of the middle schools, and the bottom panel displays expected outcomes, calculated by using the regression equation and filling in the value for actual expenditures as the variable predicting outcome. If there were no relationship between expenditure and outcome, then the graph of expected outcomes would be horizontal, showing the same outcome for every level of expenditure. Two of the three graphs here show a nearly horizontal line. Only in the case of the attendance change is there a perceptible positive slope in the line, indicating a small relationship between expenditures and attendance change.

The coefficient for the change in attendance suggests that an increase in expenditure per student of about $500 would increase the average attendance rate for program participants by one (1) percent. It is important to note that, in 1986-87, students' average attendance actually deteriorated from their 1985-86 levels in all but seven of the 29 schools. This suggests that as students age, their attendance tends to fall. If this is true, then the effect of the program expenditures (or of the program itself) may be to retard that drop slightly.

It should be emphasized that these data cannot be used to ask what would happen if there were no dropout prevention program. It is tempting to say that no program would be equivalent to a zero expenditure and that if this were the case,

TABLE 7-8

Regression Equations Predicting Program Outcomes from Costs
DPP Middle Schools, 1986-87

Dependent (Outcome) Variable: Change in Attendance

Coefficient for Expenditures:	.1739
Standard Error of Coeff.	.1278
Constant	-3.1712

R Squared = .0642

Dependent Variable: Change in Proportion of Courses Passed

Coefficient for Expenditures:	.0784
Standard Error of Coeff.	.5406
Constant	3.1577

R Squared = .0008

Dependent Variable: Change in Standardized Reading Score

Coefficient for Expenditures:	.0073
Standard Error of Coeff.	.0884
Constant	2.1113

R Squared = .0002

Note: In these equations, expenditure figures are entered in units of one hundred dollars (e.g., $1400 = 1.400)

Figure 7-4

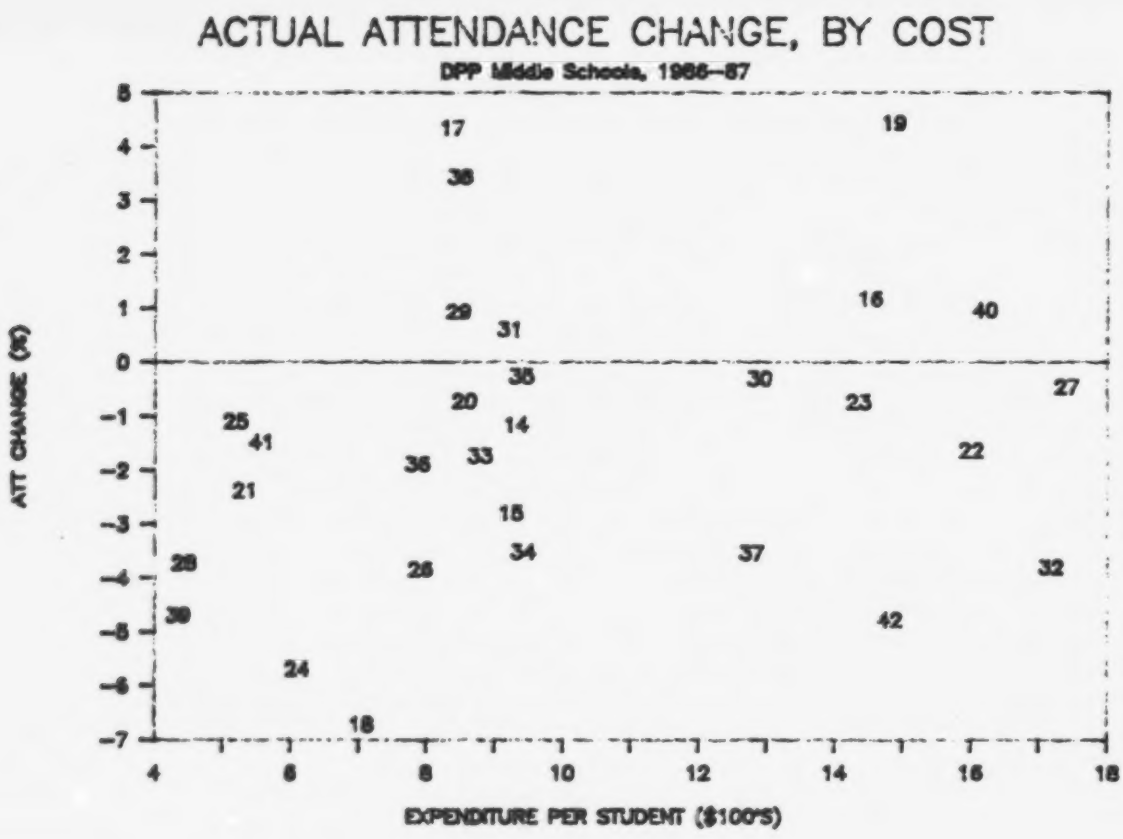


Figure 7-4a

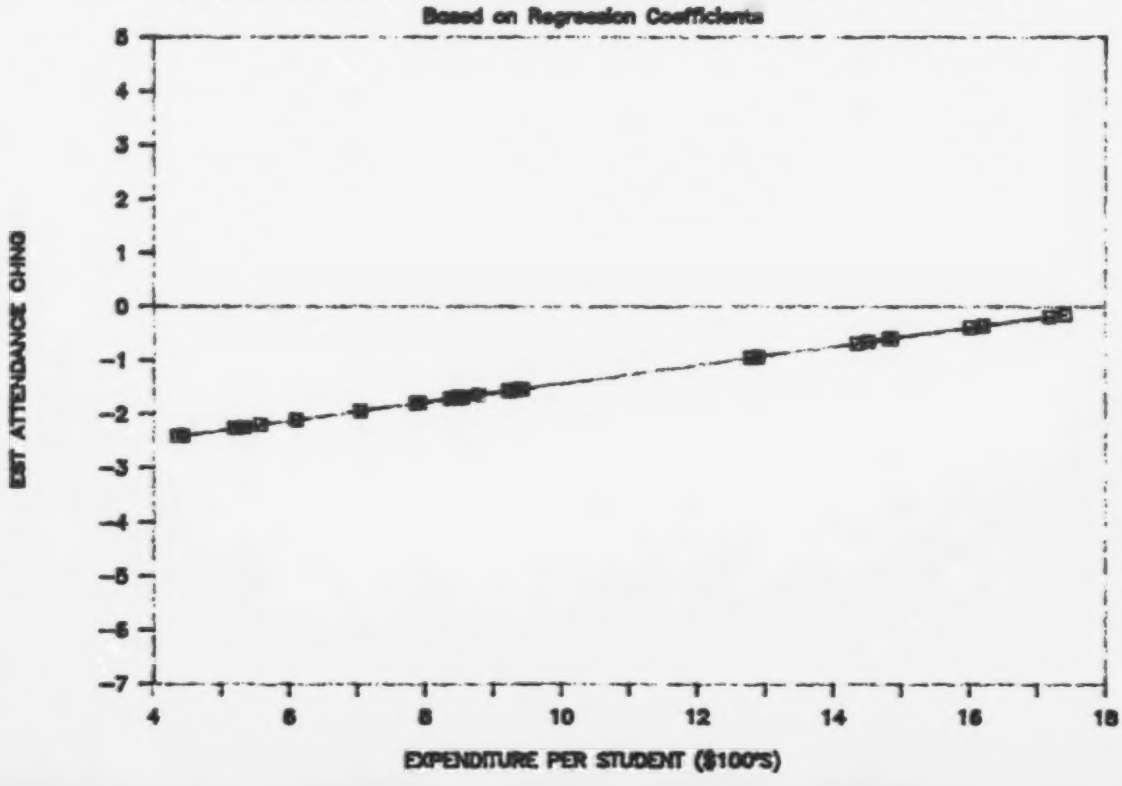

EXPECTED ATTENDANCE CHANGE, BY COST
Based on Regression Coefficients
EST ATTENDANCE CHNG
EXPENDITURE PER STUDENT ($100'S)

Figure 7-5

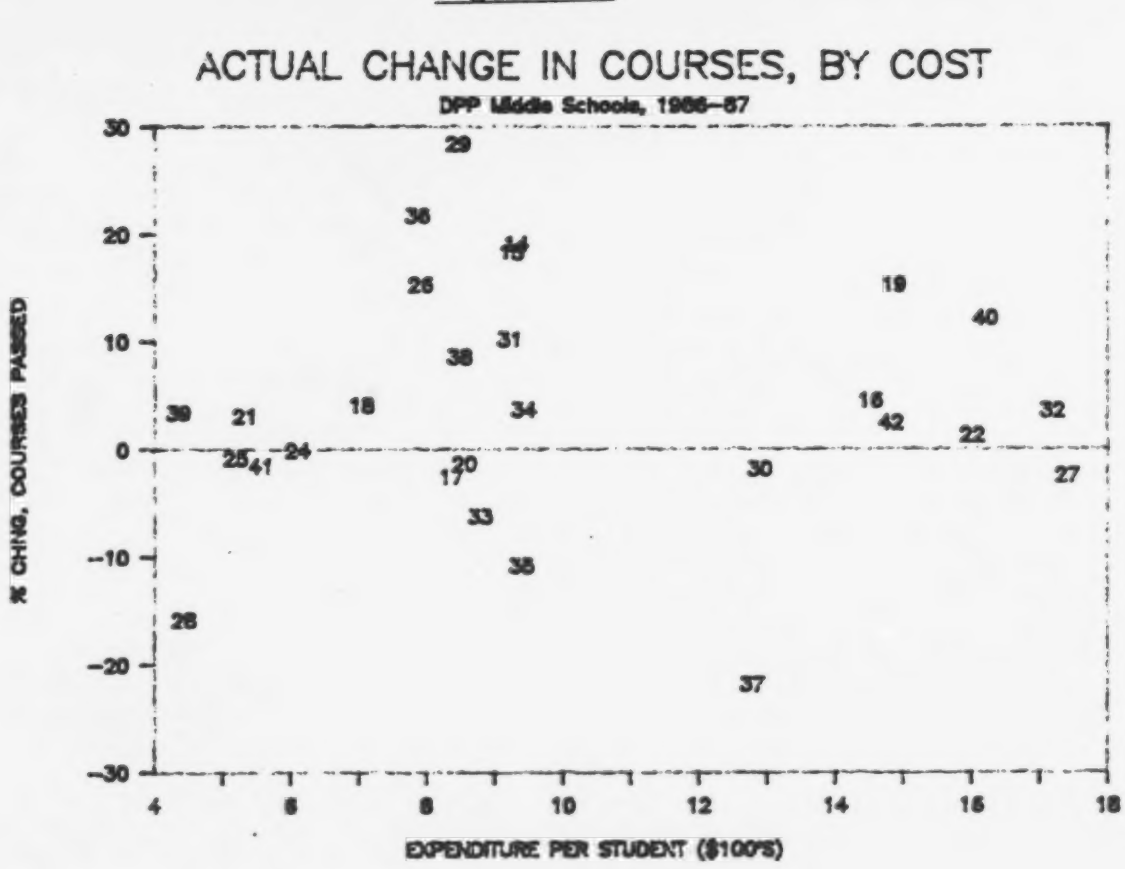


Figure 7-5a

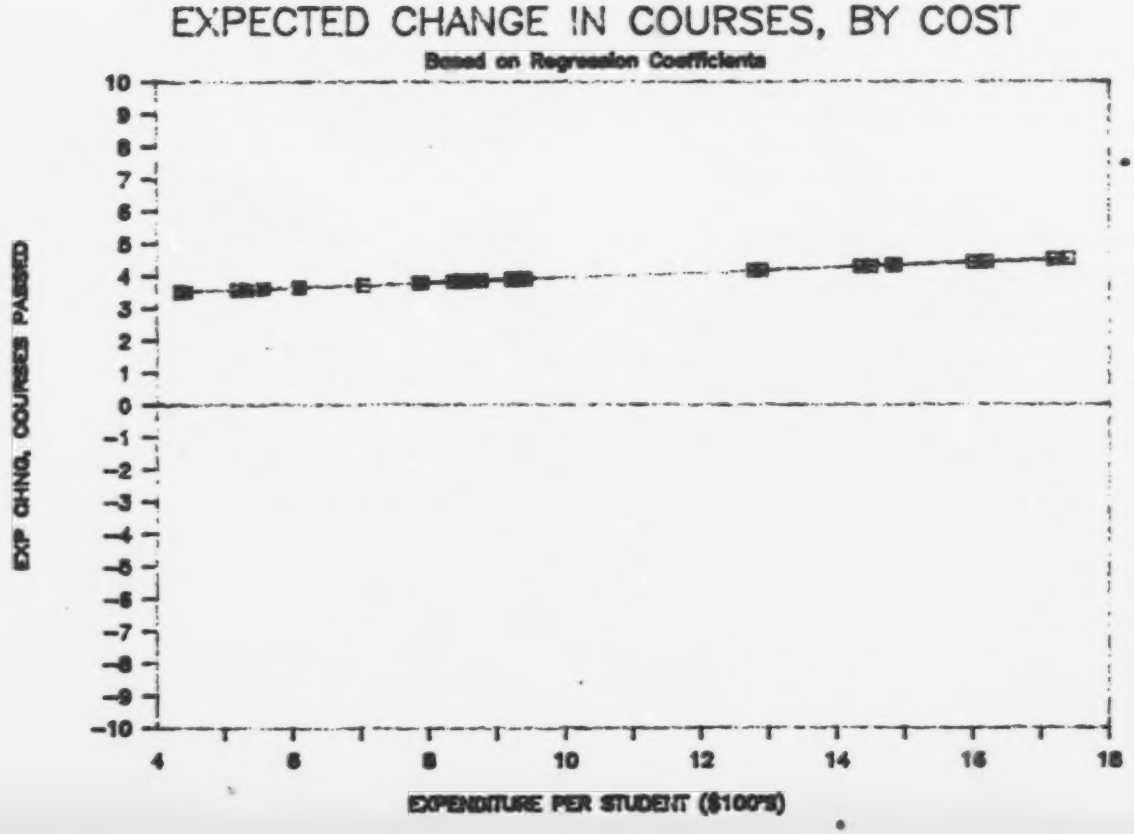

EXPECTED CHANGE IN COURSES, BY COST
Based on Regression Coefficients
EXP CHNG, COURSES PASSED
EXPENDITURE PER STUDENT ($100'S)

Figure 7-6

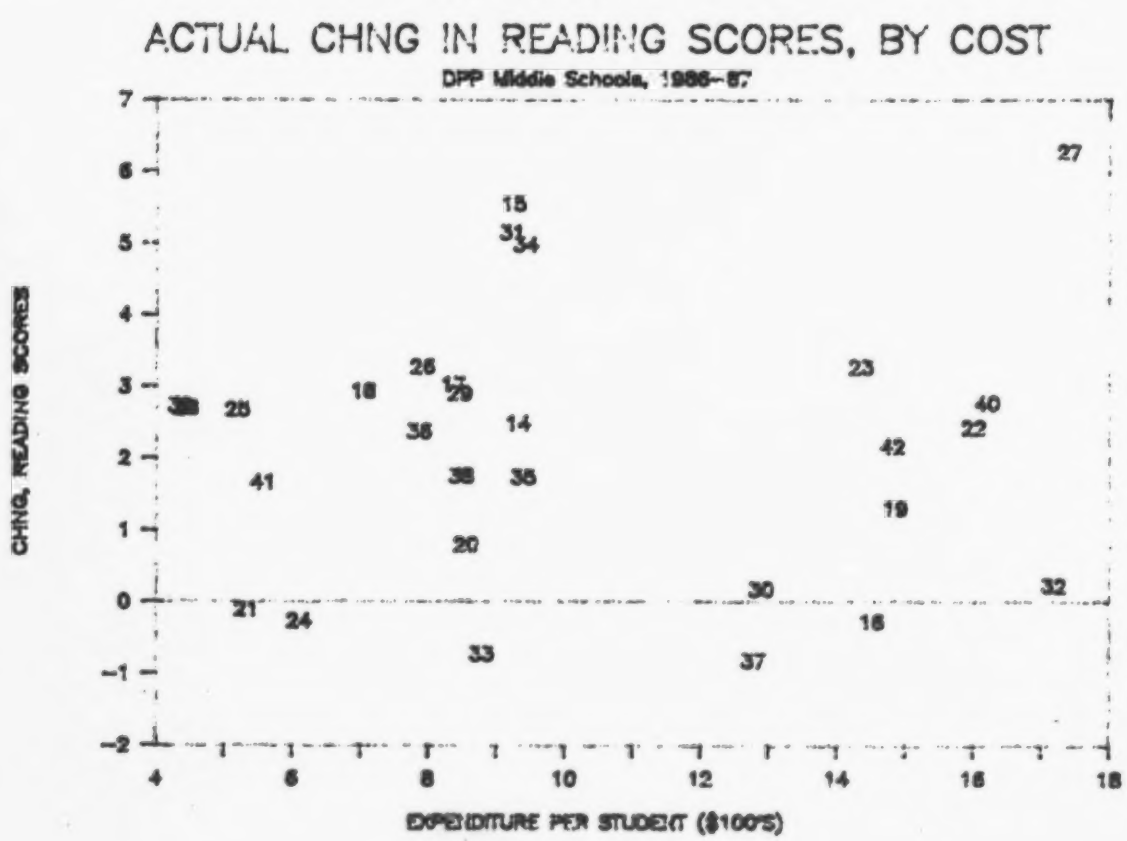
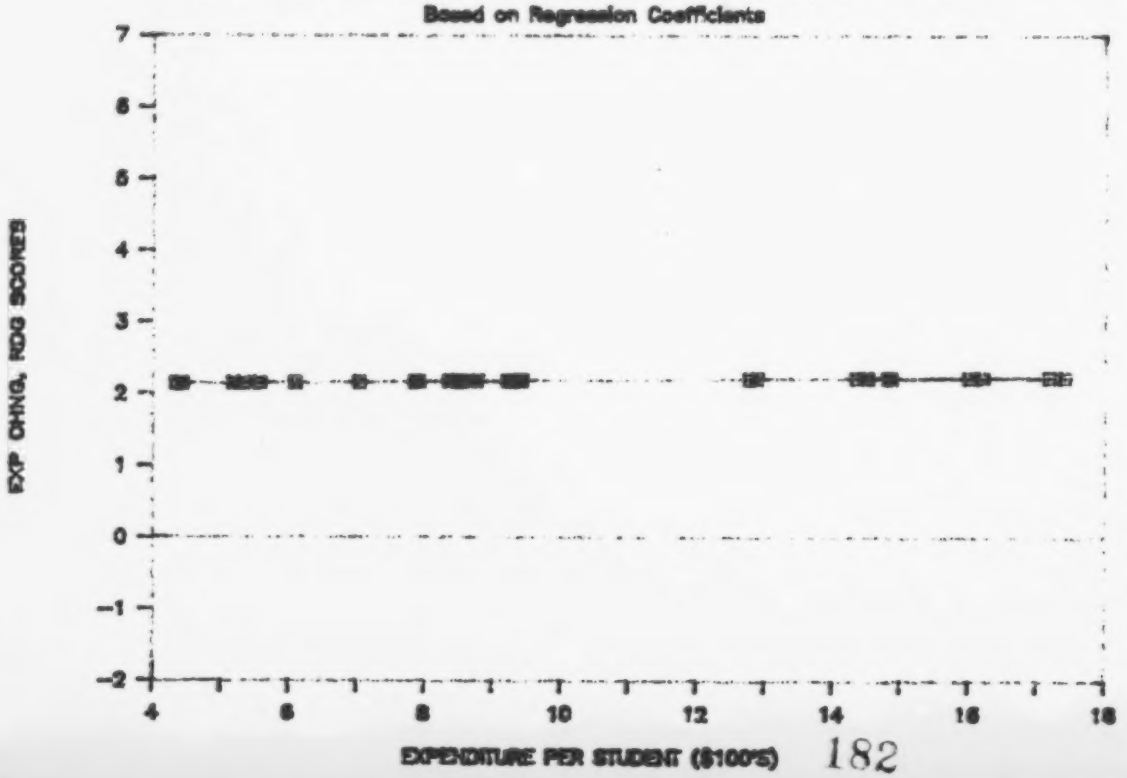


Figure 7-6a



then the expected change in attendance in the absence of the program would be indicated by the value of the regression constant -- the predicted value of the dependent variable (attendance) when the independent variable (expenditure) is zero. But it is very risky to use this type of an estimate to make predictions outside of the range of the data (i.e., the range of program expenditures among the schools), especially since the outcomes are so weak to begin with.

The middle schools implemented two distinct models of service delivery, the Project Connect model and the CBO model. Although there is no statistically significant difference between the means for any of the outcome variables for the two models, it is possible that the effectiveness of expenditures might vary between models. As we have discussed elsewhere, the schools in the CBO model (excluding District 9) were able to spend more of their allocations than the PC schools; in fact they spent almost 75% more money per student than the Project Connect schools. But despite the differences in the expenditures, students' average attendance actually fell slightly more in the CBO schools than in the PC schools (-1.53% in the CBO model vs -1.42% in the PC model). This indeed suggests that there is a difference between the models in the effectiveness of the expenditures in increasing attendance (or slowing its fall).

The regression results presented in Table 7-9 includes a dummy variable for the program model (CBO=0 and PC=1) as well as the variable for expenditures. The coefficient for expenditures is larger when models are added to the equation than when expenditures is the only independent variable, and in this analysis it is almost statistically significant. (It is significant at about the .07 level rather than the .05 level which is the conventional measure of significance.) This coefficient indicates that an increase in expenditures of about $300 per participant will increase attendance by about 1 percent. The coefficient for the model is not statistically significant, but it does at least suggest that for a given level of expenditure, the PC model will have a slightly higher effect. Finally, the interaction between model type and expenditure was not significant. This implies that an incremental dollar of expenditure will have the same effect for both models, although at a given level of expenditure, the attendance outcome in the PC model will be slightly larger than in the CBO model.

In order to compensate for the fact that program enrollments in the CBO model schools were smaller than in the PC schools, a condition which, as we mentioned earlier, may unfairly inflate the per pupil costs for the CBOs, we did a similar analysis regressing attendance change on program model and expenditures per school (in units of $1000). The results were very similar; the coefficient for expenditures was .0025, indicating that an expenditure of about $375 per student in a program of 150 students would increase average attendance by about 1 percent. In this analysis, the coefficient for program model was smaller (1.099), again indicating that at every level of expenditure, the

TABLE 7-9

Regression Equation Predicting Attendance from Cost and Model
DPP Middle Schools, 1986-87

Dependent Variable: Change in Attendance

Coefficient for Model:	1.4474
Standard Error of Coeff.	1.2466
Coefficient for Expenditures:	.2813
Standard Error of Coeff.	.1571
Constant	-5.0081

R Squared = .1103

Note: In this equation, expenditure figures are entered in units of one hundred dollars (e.g., $1400 = 1.400)

PC model will have a slightly higher effect, but that incremental changes in expenditures for both models have similar results.

Regressions that included a dummy variable for program model as well as the expenditure variable were carried out for the other two outcomes, but all of the coefficients were extremely small and none even approached statistical significance.